ORDER NO. VSD9406M252A
D4

Service Manual

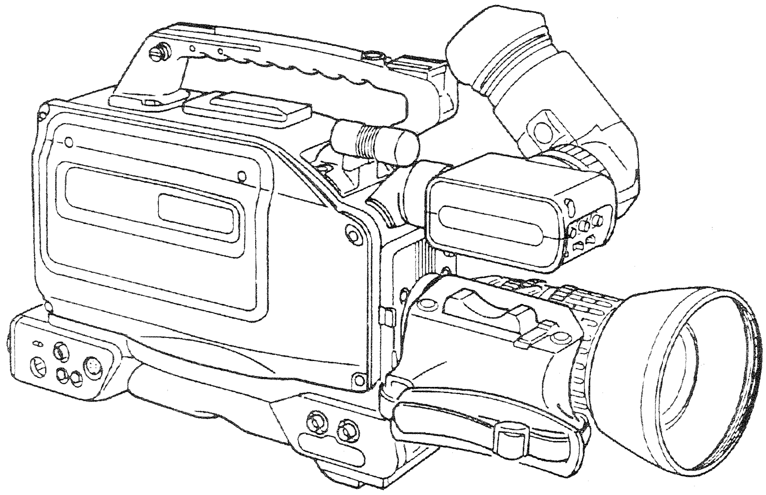
Panasonic S VHS Hi-Fi

Volume 1

S-VHS CAMERA／VTR

AG-DP800P

- Sec. 1 *Operating Instructions*
- Sec. 2 *Disassembly Procedures*
- Sec. 3 *Schematic Diagram*
- Sec. 4 *Circuit Board Diagrams*
- Sec. 5 *Exploded Views & Replacement Parts List*



The Mechanism (Sec. 6), Electrical Adjustment (Sec. 7) and Block Diagram (Sec. 8), please refer to the Service Manual Volume 2 (Order No. VSD9406M252B). V11486

The detail circuit description for this model, please refer to the Supplement Service Manual (Order No. VSD9406D210).

Panasonic®

© 1994 Matsushita Electric Industrial Co., Ltd. All rights reserved.
Unauthorized copying and distribution is a violation of law.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advice non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service manual by anyone else could result in serious injury or

SPECIFICATION

Power Supply	DC12V(10.5～17V)
Consumption	23W(Recording mode:20W)
Operating Temperature	32℉～104℉(0℃～40℃)
Humidity	35%～80%
Dimensions (W×H×D)	4-7／8×11-11／16×14-1／8(inch) 123×296×357(㎜)
Weight	9.9lbs(4.5kg)(incl.EVF) 14.74lbs(6.7kg)(incl.EVF,Lens,Tape)
【CAMERA】	
Image Sensor	1／2inch Frame Interline Transfer (FIT) CCD×3
Pixel:	380,000 pixel
H. Drive Frequency	13.5MHZ
Sesitivity	3200K 2000lux,F8.0
Minimum Illumination	Approx.2lux(F1.4／+30dB)
S／N Ratio	More than 56dB
Horixontal Resolution	More than 650 lines (center)
Sampling Frequency	13.5MHz／27MHZ
Shutter Speed	1／100, 1／125, 1／500, 1／1000 1／2000, 1／4000, 1／8000
Synchro Scan Shutter	1／61.95～1／253.78
Gain Selection	0／+9／+18／+24／Super High-Gain(+30dB)
CC／ND Filter	3200K, 5600K, 5600K+1／8ND
Pickup System	Prism sysem (F1.4)
Lens Mount	Bayonet mount for 1／2" lens
Registration Error	Less than 0.03% (over entire range, excluding lens distortion)
Scene Files	Normal, A／B, Sparkling Fluorescent light, Special
【EVF】	
Display Tube	1.5" high-resolution monochrome tube
Horizontal Resolution	More than 550 lines (center)
External Control	BRIGHT, CONTRAST, PEAKING, TALLY, ZEBRA, CHARACTER
【VTR】	
Recording System	4 rotary heads, helical scanning system, (S-VHS format)
Tape Speed	33.35㎜／sec
Tape Used	S-VHS, VHS tapes
Recording Time	120 minutes(with NV-T120)
FF／REW Time	Less than 9 minutes(with NV-T120)

【Video】		
Television Standard		EIA standard(525 lines, 60 fields) NTSC color signal
Head		4 heads (60μm)
Modulation System		Luminance: FM azimuth recording Color: converted subcarrier phase shift recording
Outputs	LINE(BNC)	1.0Vp-p 75Ω
	S-VHS(4P)	Y: 1.0Vp-p Ω C: 0.286Vp-p 75Ω
Horizontal Resolution		S-VHS: more than 400 lines VHS: more than 240 lines
S／N Ratio		S-VHS: more than 47 dB VHS: more than 45 dB
【Audio】		
Head		Normal A／C: 1 stationary head Hi-Fi audio: 2 rotary heads (36μm) Erase: 1 full track erase
Track		Normal audio 2 tracks Hi-Fi audio 2 channels
Inputs	MIC／LINE (XLR)	−60／−50／−40／−6／0／+4dBs 3 kΩ balance
Outputs	LINE (PHONO)	−8 dBv low −8 dBv low-imp. unbalance
	EARPHONE	−60～−20 dBv, 8Ω
S／N Ratio		Better than 48 dB (Dolby ON, A curve, S-VHS tape)
Dynamic Range		More than 80 dB
Frequency Respose		Normal: 100Hz～10KHz Hi-FI: 20Hz～20KHz
Crosstalk		Normal: More than 40 dB Hi-Fi: More than 55 dB
【I／O Connector】		
CAMERA OUT(BNC)		Composite signal 1.0Vp-p 75Ω
GENLOCK IN(BNC)		Black Burst signal 1.0Vp-p 75Ω
VTR (26P)	Video out	Composite 1.0Vp-p 75Ω
	Audio out	−20 dBv low-impedance unbalance
	Start／Stop	Start: 5V, Stop: 0V impedance 1kΩ
	Tally	REC: 5V,Pause: 2.5V hi-impedance out
LENS		12 pins
EXT DC		XLR 4P

【ACCESSORIES】

1.5" Viewfinder
Sholder strap
Lithium Battery
Battery mounting terminal
Anton Bauer Battery Adaptor

INTRODUCTION

This Service Manual contains the technical information(Operating Instructions, Disassembly, Schematic／Circuit Board Diagrams and Parts List) which will allow service personnel to understand and service the Panasonic S-VHS 3CCD camera／recorder model AG-DP800P.

The this model has many special features as described later. These features make the AG-DP800 an ideal unit for production, business, education and entertainment.

CONTENTS

SPECIFICATIONS 1
SAFETYPRECAUTIONS 3
SERVICE INFORMATION 4
SECTION 1 OPERATING INSTRUCTIONS 1-1
System Chart 1-2
Control and Their Function 1-2
Attachment of Peripheral Units 1-11
Date & Time Setting 1-12
Power Supply 1-14
Black & White Balance Adjustment 1-16
Recording 1-18
Playback⁄ Monitoring 1-21
Time Code 1-23
Menu Settings 1-24
Other Functions 1-32

SECTION 2 DISASSEMBLY PROCEDURES 2-1
2-1. Disassembly Flow Chart 2-2
2-2. Deteiled Disassembly Method 2-3
2-3. Screws 2-9
2-4. Dimensions 2-10

SECTION 3 SCHMATIC DIAGRAMS SCM-1
SECTION 4 CIRCUIT BOARD DIAGRAMS CBA-1
SECTION 5 EXPLODED VIEWS & REPLACEMENT PARTS LIST PRT-1
Servicing Fixtures & Tools List PRT-2
VTR Mechanism Section (1) PRT-2
VTR Mechanism Section (2) PRT-4
Frame & Casing Parts Section (1) PRT-6
Frame & Casing Parts Section (2) PRT-8
EVF Section PRT-10
Packing Parts section PRT-11
Electrical Replacement Parts List PRT-12

ATTENTION:
The product you have purchased is powered by a rechargeable battery. The battery is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

Replace battery with part No. CR2032 only. Use of another battery may present a risk of fire or explosion.
Caution—Battery may explode if mistreated. Do not recharge, disassemble or dispose of in fire.

SAFETY PRECAUTIONS

GENERAL GUIDELINES

1. When servicing observe the original lead dress. If a short circuit is found, replac all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protectiv devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.

LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs onthe plug.
2. Measur the resistance value, with an ohm meter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwhead connectors, contrl shafts, etc. When the exposed metallic part has a return path to the chassis, the reading shoulb be between 1MΩ and 5.2MΩ.
   When the exposed metal dose not have a return path to the chassis, the reading must be ∞.

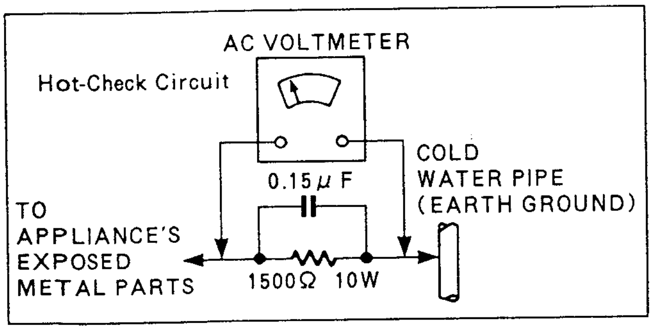


Figure 1

LEAKAGE CURRENT HOT CHECK (See Figure 1)

1. Plug the AC cord directly into the AC outlet.
   Do not use an isolation transformer for this check.
2. Connect a 1.5KΩ, 10W resistor, inparallel with 0.15μF capacitor, between each exposed metallic part on the set an a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measur the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outside of the limits specified, there is a possiblity of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

ELECTROSTATICALLY SENSITIVE(ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground.
   Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package untilimmediately before you are ready to install it. (most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION: Be sure no power is applied to the chassis or circuit, and observe all otner asfety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devoces. (Otherwise harmless mother such as the brushing together of your clothes fabric or the lifting of your foor from a carpeted floor can generate static electricity sufficient to damage an ES device).

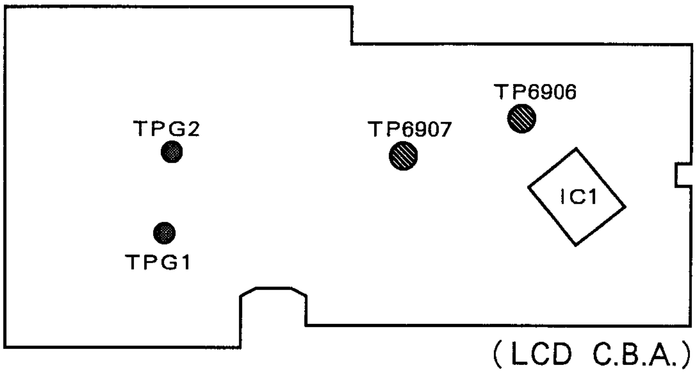
SERVICE INFORMATION

1. HOUR METER RESET (Drum rotation time)

1. Turn off POWER.
2. Open the Right Panel. (See Section 2: Dsiassembly Procedures)
3. Connect a jumper wire between TP6906 and TPG(GND) on the LCD C.B.A.
4. Turn the POWER while the RESET button is depressed.

2. ERROR LOG DATA RESET

1. Turn off POWER.
2. Open the Right Panel. (See section 2: Disassembly Procedures)
3. Connect a jumper wire between TP6907 and TPG(GND) on the LCD C.B.A.
4. Turn the POWER while the START button is depressed.



(LCD C.B.A.)

Memo

SECTION 1

OPERATING INSTRUCTIONS

CONTENTS

System Chart ······ 1-2

Control and their Functions ······ 1-2

Attachement of Peripheral Units ······ 1-11
- Attaching the lens ······ 1-11
- Attaching the viewfinder ······ 1-11
- Backup Battery ······ 1-12

Date & Time Settings ······ 1-12
- Initialing the Memory ······ 1-12
- Setting the date and time ······ 1-13

Power Supply ······ 1-14
- Using the AU-BP402 battery pack ······ 1-14
- Using the AC Power ······ 1-15
- Using the Anton Bauer battery pack ······ 1-15

Black & White Balance Adjustments ······ 1-16
- Black Balance ······ 1-16
- White Balance ······ 1-17

Recording ······ 1-18
- Normal recording ······ 1-18
- Simple editing ······ 1-19
- Audio recording ······ 1-19
- Power save mode ······ 1-20
- Rec review ······ 1-20

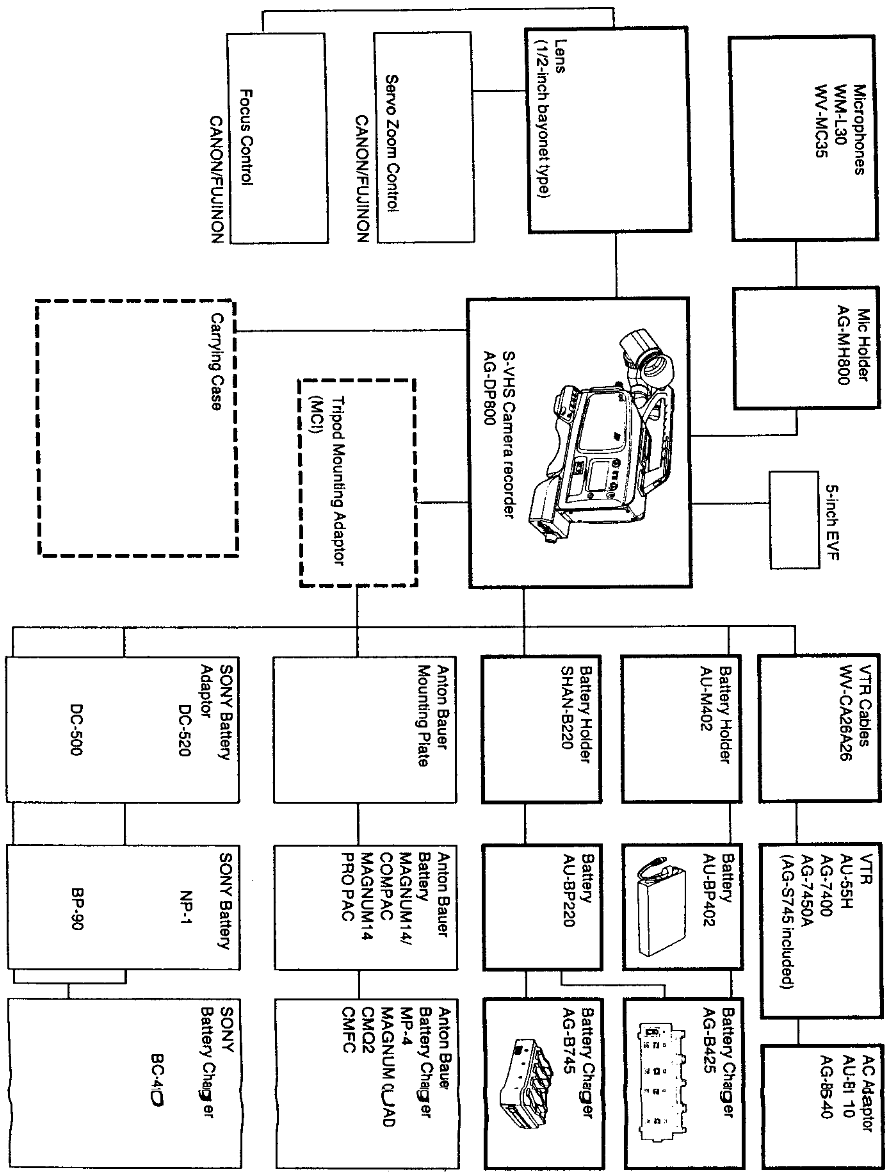
Playback／monitoring ······ 1-21
- Playback ······ 1-21
- Cue and review playback ······ 1-22
- monitoring ······ 1-22

Time Code ······ 1-23
- Time code generator settimgs ······ 1-23

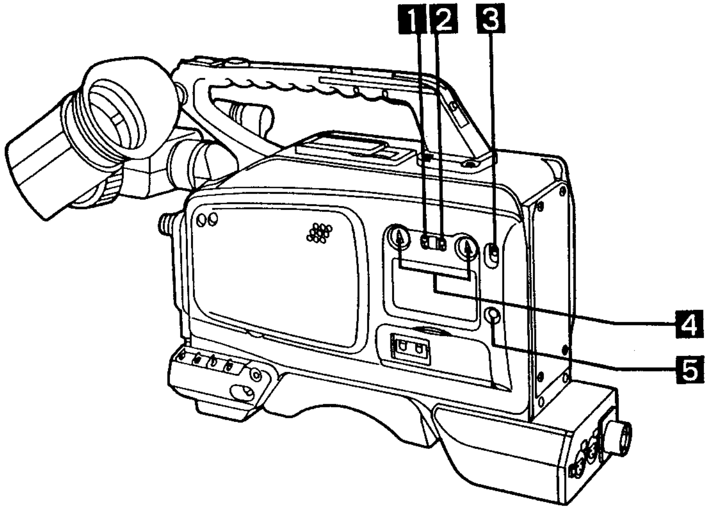
Menu Settings ······ 1-24
- Main Manu ······ 1-25
- EVF Display Menu ······ 1-26
- Camera Setting Manu ······ 1-26
- Scene File Menu ······ 1-28
- VTR Operation Menu ······ 1-28
- Time／Date Menu ······ 1-29
- Time Code Menu ······ 1-29
- Audio Menu ······ 1-30
- Battery Menu ······ 1-31
- Diagnosis Menu ······ 1-31

Other Functions ······ 1-32
- Connector signals ······ 1-32
- Handling the Phantom mic ······ 1-32

System Chart


Focus Control CANON/FUJINON
Servo Zoom Control CANON/FUJINON
Lens (1/2-inch bayonet type)
Microphones WM-L30 WV-MC35
Carrying Case
Tripod Mounting Adaptor (MCI)
S-VHS Camera recorder AG-DP800
Mic Holder AG-MH800
5-inch EVF
SONY Battery Adaptor DC-520 DC-500
Anton Bauer Mounting Plate
Battery Holder SHAN-B220
Battery Holder AU-M402
VTR Cables WV-CA26A26
SONY Battery NP-1 BP-90
Anton Bauer Battery MAGNUM14/ COMPAC MAGNUM14 PRO PAC
Battery AU-BP220
Battery AU-BP402
VTR AU-55H AG-7400 AG-7450A (AG-S745 included)
SONY Battery Charger BC-410
Anton Bauer Battery Charger MP-4 MAGNUM QUAD CMQ2 CMFC
Battery Charger AG-B745
Battery Charger AG-B425
AC Adaptor AU-B110 AG-B540

Controls and their Functions



1 AUDIO AGC Switch

ON: The CH1 and CH2 recording levels are adjusted automatically. At this position, the CH1 and CH2 audio level controls do not function.
LIMIT: The limiter is activated only when the input level is excessively high.
OFF: The CH1 and CH2 recording levels can be adjusted manually.

2 AUDIO HI-FI/NORM Switch

This switch selects Hi-Fi audio or normal sound to be indicated and output as the sound of the level meter, AUDIO OUT connectors and speakers.

3 LIGHT Switches

Set these to the ON position to light up the display area.

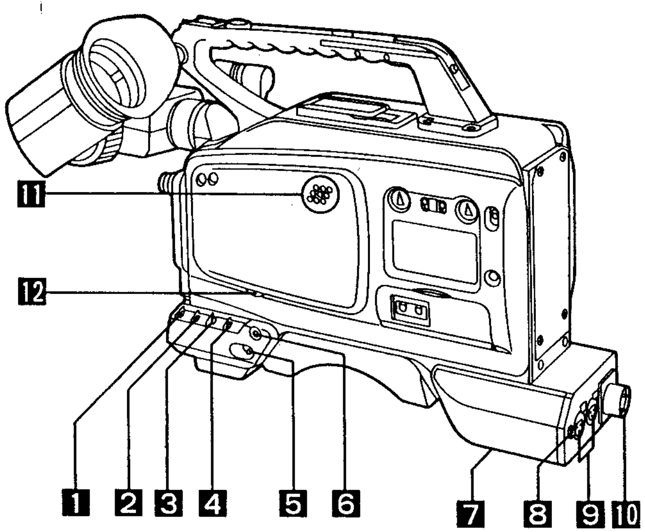
4 Audio Level Controls

To adjust the audio levels, turn the CH1 and CH2 controls while observing the level meter, and adjust the input volume of each channel.
Normal audio and Hi-Fi audio signals are adjusted simultaneously to the same level.

5 RESET Button

The display is cleared to zero when this button is pressed while the display area is in the counter or time code generator (TCG) setting mode.

Controls and their Functions (Continued)



1 GAIN Selector Switch

When the camera screen is dark, change the position of this switch to increase the gain and make the screen brighter.

0 dB: The switch is normally kept at this position.

HIGH: The gain of the camera video amplifier is increased to the value (9 dB, 18 dB, 24 dB or super high gain) which has been preset using the on-screen menu. (Increasing the gain results in an increase in noise.)

AGC (Camera AGC function): The gain is automatically adjusted to the appropriate value between 0 dB and 24 dB depending on the brightness of the screen. (If the lens iris is in the manual setting, it will be forcibly set to auto.) The gain is set to 0 dB when the light is adequate, and it is increased automaticaly when the lens iris is close to being kept open all the time and yet the amount of light is insufficient.

*The camera AGC will not function properly when a lens without an automatic aperture function is used.

2 AWB Memory Selector Switch

A or B: When the front panel AUTO W/B BAL switch is set to AWB, the white balance is adjusted automatically, and the adjustment value is automatically stored in the A or B memory.

PRE: The white balance is preset to the color temperature of 3200°K (the illuminance temperature of a halogen lamp). At this position, the front panel AUTO W/B BAL switch does not function when it is set to AWB.

3 OUTPUT Selector Switch

This selects either the video signals being shot by the camera or the color bar signals.

CAM: The video signals shot by the camera are output.

BAR: The color bar signals are output.

4 SHUTTER Switch

This sets the electronic shutter ON or OFF.

OFF: The electronic shutter is not activated.

ON: The electronic shutter is activated. The shutter speed is set using the SET + or SET − switch.

S/S: The synchro scan shutter mode is established. The shutter speed can be changed almost continuously from about 1/60 to 1/200 by operating the SET + and SET − switches.

5 POWER Switch

ON: The entire camera recorder is operated.

SAVE: The recorder is set to the power save status. The VTR START (REC start) operation can be performed but it takes some moments for the recording to commence. The power save mode is restored when the VTR START (REC stop) button is pressed.

OFF: Power to the camera recorder is switched off.

6 MODE CHECK Button

This enables the settings of the camera switches to be checked on the viewfinder.

7 BREAKER Button (Bottom panel)

If trouble should cause an excessively high current to flow inside the camera recorder, the circuit breaker is tripped to cut off the power automatically and protect the unit. Push this button in after inspecting inside the product and taking corrective action. The power is restored if no trouble has occurred.

8 Earphone jack

The sound can be monitored by connecting an earphone to this jack. When connected, no sound is heard through the speaker.

9 Audio Input Connectors

External microphones or line input signals are connected to these connectors.

10 26P VTR Connector

This is for a back-up VTR. The AG-7400 VTR or similar model can be connected.

11 Speaker

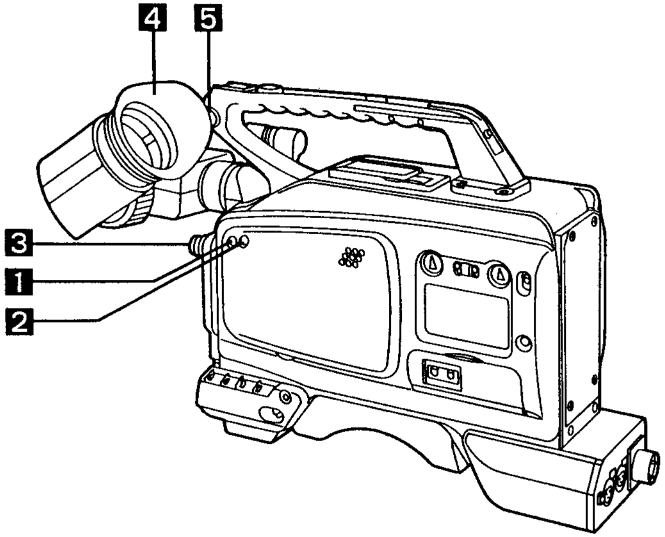
The sound can be monitored through this speaker.

- The sound from the speaker is automatically cut off when an earphone is connected to the earphone jack.
- The MONITOR switch is used to select the channel whose sound is to be monitored.

12 Audio Monitor Level Control

This is used to adjust the volume of the sound which is being monitored.

Controls and their Functions (Continued)



1 Scene File Selector Button

This enables scene files to be selectd. For details, refer to the next page.

2 Super Iris Button

Press this button to toggle between the normal mode and super iris mode.

Normal mode: Normal shooting takes place in this mode.
Super Iris mode: Used for backlight shooting.
Note: This function operates when the lens is in the automatic iris adjustment mode.

3 Filter Selector Control

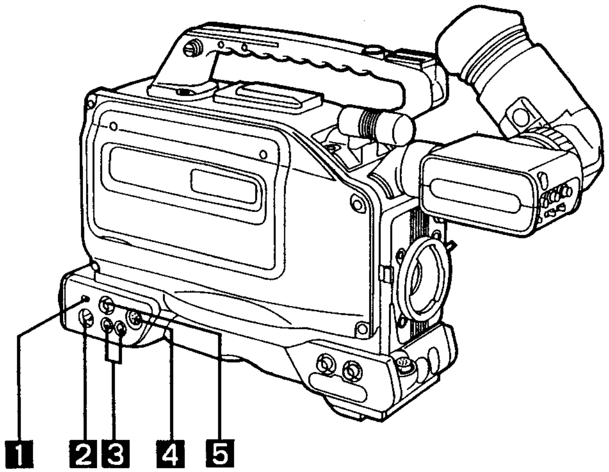
Set this control as shown below according to the light sources illuminating the subject.
Control No. and color temperature of filter

Control No.	Color temp.	Shooting condition
1	3200 K	Sunrise, sunset, subjects illuminated by incandescent bulbs
2	5600 K+ 1/8 ND	Outdoors under a clear sky
3	5600 K	Outdoors on a cloudy/rainy day

4 *Viewfinder*

5 *Shoulder Strap Mount*

This is used to attach the shoulder strap provided with the product.



1 Power Selector Switch

This selects the power supply to be used.

BATT/EXT DC: Set to this position when supplying power from the external DC input socket or battery.
VTR: Set to this position when supplying power from the 26P VTR connector.

2 External DC Input Socket

The AC adaptor is connected to this external power input socket, and when it is connected, power is automatically supplied from the external source.

3 AUDIO OUT Connectors (Phono jacks)

4 VTR VIDEO OUT Connector (Y/C)

5 VTR VIDEO OUT Connector (BNC)

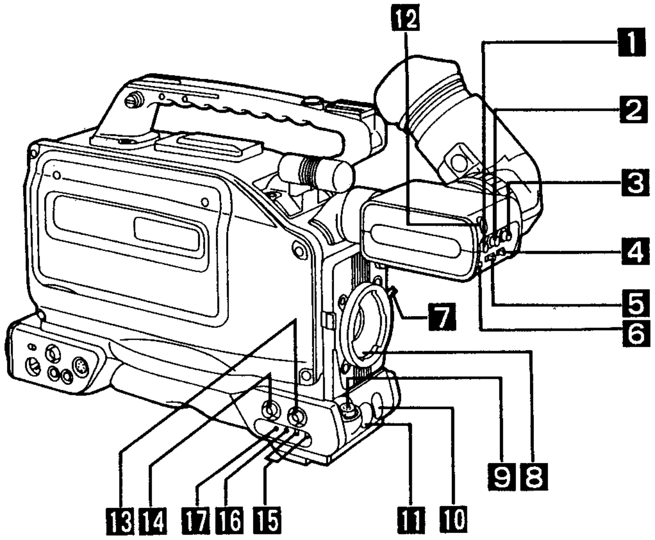
Scene file selection

When the scene file selector button is pressed, the settings change in the sequence given below:

→NORMAL→FILE A→FILE B→FLUO.LAMP→SPARKLING→SPECIAL

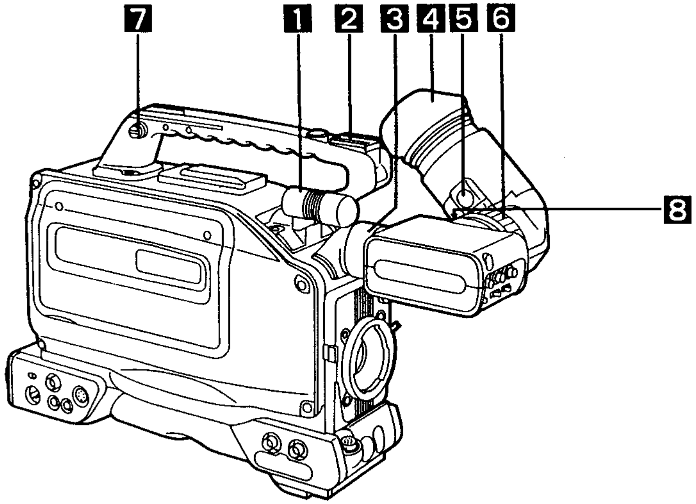
NORMAL:	For the standard picture quality
FILE A:	For file A with the picture quality set by the user
FILE B:	For file B with the picture quality set by the user
FLUO.LAMP:	For improved color reproduction under fluorescent lighting
SPARKLING:	For darkening the color and making the picture sharper.
SPECIAL:	For achieving the reproduction of skin complexions similar to those which are obtained by Plumbicon (pick-up) tubes; the picture quality is similar to that obtained by the broadcasting cameras equivalent to those (AQ series) made by Panasonic.

Controls and their Functions (Continued)

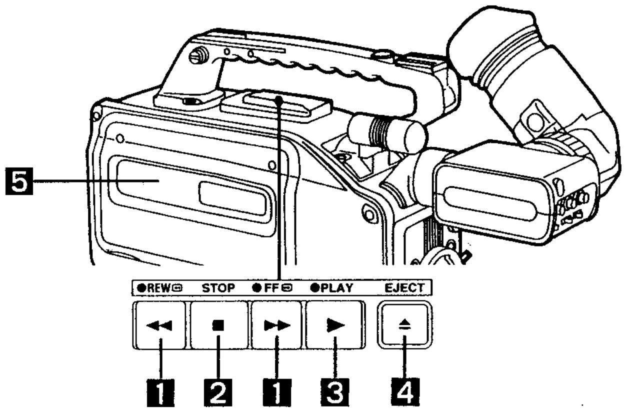


1	**PEAKING Control**	Turning this control intensifies the outlines of the images in the viewfinder for easier focusing. However, this has no effect on the camera's output signals.
2	**CONTRAST Control**	This adjusts the contrast of the image in the viewfinder. However, it has no effect on the camera's output signals.
3	**BRIGHT Control**	This adjusts the brightness of the image in the viewfinder. Turning it clockwise makes the image brighter. However, it has no effect on the camera's output signals.
4	**TALLY ON/OFF Switch**	**ON:** The tally lamp on the front of the viewfinder lights. **OFF:** The tally lamp on the front of the viewfinder does not light.
5	**ZEBRA ON/OFF Switch**	**ON:** A zebra pattern is displayed in the viewfinder. **OFF:** No zebra pattern is displayed.
6	**CHARACTER ON/OFF Switch**	This turns the character which are displayed in the viewfinder ON or OFF. **ON:** Characters are displayed in the viewfinder. **OFF:** No characters are displayed in the viewfinder.
7	**Lens Clamp Lever**	After attaching the lens to the lens mount, tighten this lever to hold the lens in place.
8	**Lens Mount (Bayonet type)**	The lens is attached to this mount.
9	**LENS Connector (12-pin)**	The connecting cable of the lens is connected to this connector. For a detailed description of the lens to be used, refer to the Operating Instructions accompanying the lens.
10	**AUTO W/B (WHITE/BLACK) BAL Switch**	**AWB:** The white balance is adjusted automatically. Setting the AWB Selector switch at the side to A or B and then operating the AUTO W/B BAL switch enters the adjusted value into memory A or B. Bear in mind that this operation will not be performed when the selector switch has been set to PRE. **ABB:** The black balance is adjusted automatically. The value to which it has been adjusted is entered in an exclusive memory. When it is released, the switch automatically returns to its center position.
11	**VTR START/STOP Button**	This is for starting or stopping the recording.
12	**TALLY Lamp**	This lights while the image being shot by the camera is being recorded by the VTR. It lights and flashes in tandem with the TALLY lamp inside the viewfinder.
13	**CAMERA GENLOCK IN Connector (BNC)**	To apply genlock to the camera recorder from an external unit, connect the unit to this connector.
14	**CAMERA VIDEO OUT Connector (BNC)**	The camera's encoder (composite signal) output is sent to this connector.
15	**SC Rough Adjustment Switches**	These roughly adjust the subcarrier phase in the genlock mode.
16	**SC Fine Control**	This finely adjusts the subcarrier phase in the genlock mode.
17	**Horizontal Sync Phase Control**	This adjusts the horizontal sync phase in the genlock mode.

Controls and their Functions (Continued)



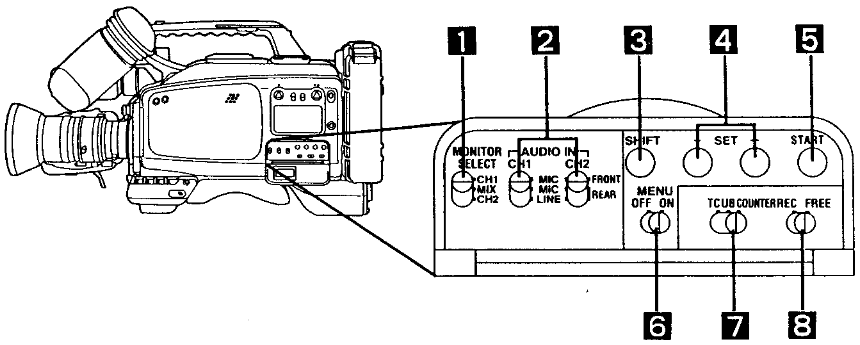
1	**Microphone**	This is a compact, unidirectional type of microphone. However, by replacing it with the optional holder, a highly directional microphone can be attached instead.
2	**Accessory Hole**	This is for mounting video lights or other accessories.
3	**Viewfinder Clamp Ring**	This is used to attach and detach the viewfinder. By loosening the clamp ring, the viewfinder can be rotated by 90° so that it is pointing upward.
4	**Eye Cup (Eyepiece)**	
5	**Eye Cup Removal Lever**	This is used to remove the eye cup. Move the lever in the direction shown by the arrow and then simply slide the eye cup to remove it.
6	**Viewfinder Stopper**	This is used to adjust the viewfinder's position. Loosen the stopper and move the viewfinder to the left or right to adjust its position. After the position has been adjusted, tighten the stopper to hold the viewfinder in place.
7	**Shoulder Strap Mount**	This is used to attach the shoulder strap provided with the product.
8	**Diopter Adjustment Control**	This is adjusted to the eyesight of the operator so that he or she can clearly see the images on the viewfinder screen.
9	**Eyepiece front/back** ***adjustment ring***	At the unlock position, the eyepiece can be moved further toward the front or back. After moving the eyepiece to the desired position, lock the ring to secure it there.



Function Buttons

1	**REW (Rewind)/FF (Fast Forward) Buttons**	•When the REW or FF button is pressed while the tape has stopped traveling, the tape is rewound or fast forwarded normally in the E-E mode. •When pressed during tape play, the tape is reviewed or cued at approximately 5 times the normal tape speed.
2	**STOP Button**	The tape stops traveling when this button is pressed. It does not function during recording. To stop the tape during recording, first set the VTR to the REC/PAUSE mode and then press the STOP button.
3	**PLAY Button/Lamp**	Tape play commences when this button is pressed, and the lamp lights.
4	**EJECT Button**	When this is pressed, the cassette holder is raised to enable a cassette to be inserted or removed. It does not function when the VTR is in the REC or REC/PAUSE mode. To eject a tape in either of these modes, the tape should be stopped first and then the EJECT button pressed.
5	**Cassette Holder**	This is the slot into which the cassette tape is inserted.

Controls and their Functions (Continued)



1 MONITOR Switch

This is for selecting the speaker or earphone sound.

CH1: The CH1 sound can be monitored.
MIX: The CH1 and CH2 mixed sound can be monitored.
CH2: The CH2 sound can be monitored.

2 AUDIO IN Selector Switches

These switches select the CH1 and CH2 audio inputs.

FRONT MIC: For recording the audio signals from the microphone built into the camera.
REAR MIC: For connecting an external microphone to the audio input connector (XLR 3P) on the rear panel and recording its audio signals.
REAR LINE: For connecting line signals to the audio input connector (XLR 3P) on the rear panel and recording them.

3 SHIFT Button

This is used for time code generator and menu item settings.

4 SET –, SET + Buttons

These are used for changing the time code generator, menu, electronic shutter speed or synchro scan shutter speed settings and for adjusting the VTR tracking.

5 START Button

Press this button to indicate the time code generator setting on the display. The button is used to make the time code generator and menu item settings.

6 MENU ON/OFF Selector Switch

OFF: The switch is normally kept at this position when the camera recorder is being operated.
ON: For displaying or changing a menu item.

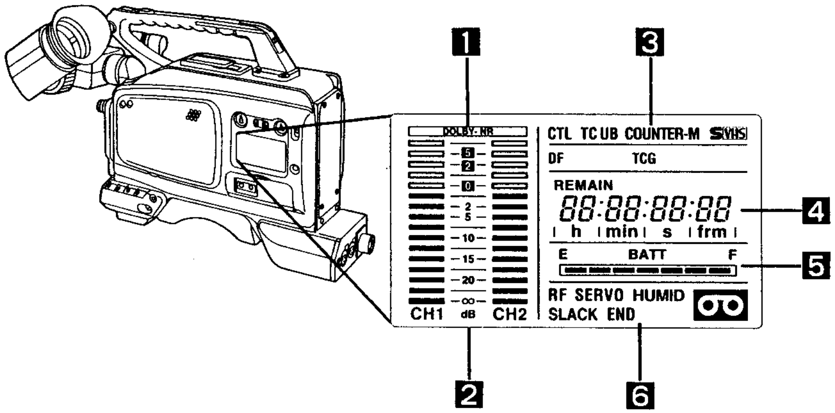
7 TC/UB/COUNTER Selector Switch

TC: For setting or displaying the time code data.
UB: For setting or displaying the user bit data.
COUNTER: For indicating the reel counter on the display.

8 REC/FREE Selector Switch

REC: For counting the time code only in the VTR's recording mode; REGEN operation is performed when LTC is ON (set using the menu item).
FREE: For counting the time code in the same way as for the time regardless of the VTR mode.

Controls and their Functions (Continued)



Display

1 DOLBY-NR display

Lights when the DOLBY NR menu item has been set to ON.

2 Audio level meter

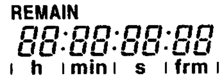
Indicates the CH1 and CH2 audio levels.

3 Mode displays

TC: Lights when the counter is in the TC (time code) mode.
UB: Lights when the counter is in the UB (user bit) mode.
DF: Lights when the time code is in the DF (drop frame) mode.
COUNTER: Lights when the counter is in the reel count mode.
TCG: Lights when the counter is in the TCG (time code generator) mode.
—M: Lights in the counter memory mode (0000 stop mode).
CTL: The counter memory mode is set using the menu item.
S-VHS: Lights in the S-VHS mode.
▭: This denotes that a cassette tape has been loaded.

4 Counter

This indicates the time code and user bit data in units of hours, minutes, seconds and frames. It serves as a 4-digit counter in the reel count mode.



5 Remaining battery level display

This indicates the remaining battery level.
The battery is set using the menu item. For further details, refer to "How to set the menu items" (page 50).

6 Warning displays

RF: Flashing denotes that the video heads are clogged.
SERVO: Flashing denotes that the servo system is not locked.
HUMID: Flashing denotes that condensation has formed on the cylinder.
SLACK: Flashing denotes tape slack or some other problem in the tape transport system.
END: Flashing denotes that the tape has come to its end.

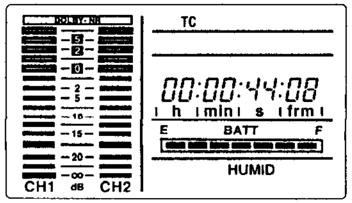
Condensation

Condensation may form on this camera recorder's cylinder when the unit is moved from a cold place into warm surroundings or when it is used in very humid conditions.
Causing the tape to travel when condensation has formed will damage the cylinder and tape.

Bear in mind the following points:

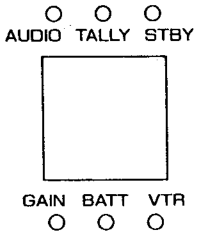
- Before inserting the cassette, set the CAM/VTR (or POWER) switch to ON or POWER SAVE, and check that none of the warning lamps are flashing and that HUMID has not lighted on the display.
- Where possible, avoid using the camera recorder in any location where condensation is liable to form.
- Remove the cassette tape when moving the camera recorder.
- If the HUMID display flashes while the cassette tape is still loaded, take the following action:
  1. Set the CAM/VTR (or POWER) switch to the ON or POWER SAVE position.
  2. Press the EJECT button to remove the cassette.

Without taking further action, wait until the HUMID display goes off.
Once this display goes off, insert the cassette tape, allow it to run and check that nothing untoward happens.
When the HUMID OPE menu item on the OPERATION menu is set to ENABLE, the VTR can be forcibly operated even when the condensation sensor has detected the formation of condensation.
However, this is an extremely risky setting which should never be used unless shooting is absolutely imperative.
The manufacturer will not be held liable for any damage which may result from operation in the HUMID OPE ENABLE.



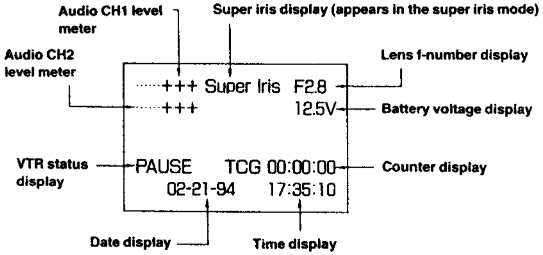
Viewfinder display

LED displays


AUDIO
TALLY
STBY
GAIN
BATT
VTR

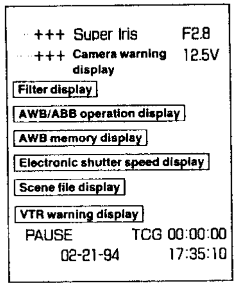
AUDIO (yellow):	Not used by this system.
TALLY (red):	Lights during recording; flashes during tape approach.
STBY (green):	Lights in the power save mode.
GAIN (yellow):	Lights when the camera gain is increased or the camera AGC mode is established.
BATT (yellow):	Flashes when the battery has run down.
VTR (yellow):	Lights or flashes when trouble has developed in the VTR.

Character displays (normal displays)


Audio CH1 level meter
Super iris display (appears in the super iris mode)
Audio CH2 level meter
Lens f-number display
+++ Super Iris F2.8
+++ 12.5V
Battery voltage display
VTR status display
PAUSE TCG 00:00:00
02-21-94 17:35:10
Counter display
Date display
Time display

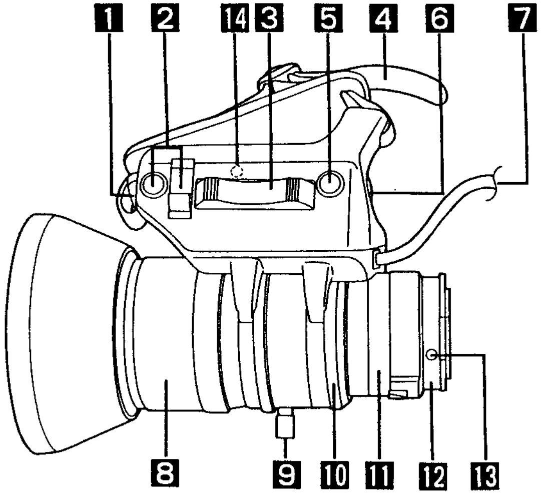
- These display appear when the CHARACTER switch on the front of the viewfinder is at the ON position.
- Each of the display can be turned OFF using the menu settings.

Character displays (displays when changes have occurred)


+++ Super Iris F2.8
+++ Camera warning display 12.5V
Filter display
AWB/ABB operation display
AWB memory display
Electronic shutter speed display
Scene file display
VTR warning display
PAUSE TCG 00:00:00
02-21-94 17:35:10

- **Camera warning display**
  A warning message appears when AWB or ABB has not been set properly.
- **Filter display**
  The filter number and name are displayed for about 3 seconds when the CC filter setting is selected.
- **AWB/ABB operation display**
  "ACTIVE" appears while the AWB or ABB operation is in progress. "OK" appears upon completion of the operation.
- **AWB memory display**
  This indicates the AWB channel A and B memory statuses and switch status. The displays appear for about 3 seconds when the AWB switch setting is selected.
- **Electronic shutter speed display**
  This indicates the electronic shutter speed. When the electronic shutter has been selected or the shutter speed has been changed, the display appears for about 3 seconds.
- **Scene file display**
  This indicates the name of the present scene file for about 3 seconds when the scene file selector button is pressed.
- **VTR warning display**
  This appears when trouble has occurred in the VTR.

14× Power Zoom Lens



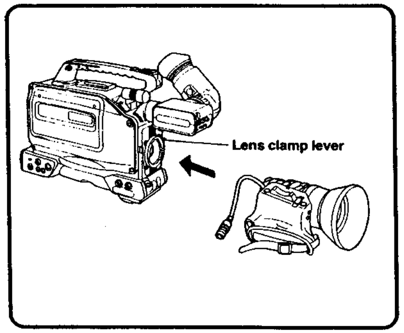
1 Automatic Iris Control	This enables the automatic iris speed to be adjusted. The control can be found inside when the rubber cap is removed. The speed is increased by turning the control clockwise but bear in mind that turning it too far will cause hunting (the operation does not stop). Be absolutely sure to adjust the control when replacing the lens or when attaching the lens for the first time.
2 Lens Iris Selector Switch [IRIS]	A: The iris is adjusted automatically. M: For adjusting the iris manually. **Note:** When the camera's AGC function has been activated, the iris is adjusted automatically even if this switch is set at the [M] position.
3 Power Zoom Control Switch	The zoom can be controlled electrically by setting the power/manual zoom selector switch to SERVO and by pressing this control switch. The zoom speed changes according to how firmly the switch is pressed.
4 Hand Strap	Adjust the strap to fit the size of your hand.
5 Return Switch [RET/REC CHECK]	This switch is used to check recordings. When it is pressed during recording pause, the recording check function is activated to play back the section which has been recorded and then establish the recording pause mode.

6 VTR Start/Stop Switch	This easily accessible switch is for handily starting and stopping the VTR recording. When it is pressed once, recording commences; when pressed again, recording stops. When this lens is mounted on the camera recorder, the VTR can be controlled by either this switch or the VTR start/stop switch on the camera.
7 Lens Cable (12-pin)	This cable is connected to the lens connector.
8 Focus Ring	Turn this ring to bring the subject into focus.
9 Zoom Ring	The size of the picture can be adjusted by setting the power/manual zoom selector switch to MENU and then turning this ring.
10 Iris Ring	The iris is adjusted by setting the lens iris selector switch to M and then turning this ring. Be absolutely sure to adjust this ring when replacing the lens or when attaching the lens for the first time.
11 Flange Back Control Ring	The flange back adjustment is performed by loosening the flange back clamp knob and then turning this ring.
12 Macro Ring	Close-up shooting is achieved by setting the lens all the way to the wide position and then rotating this ring.
13 Flange back clamp knob	Use this knob for clamping purposes after the flange back has been adjusted.
14 Power/Manual Zoom Selector Switch	When this is set to SERVO, the zoom can be adjusted using the power zoom control switch; when set to MANU, it can be adjusted using the zoom ring.

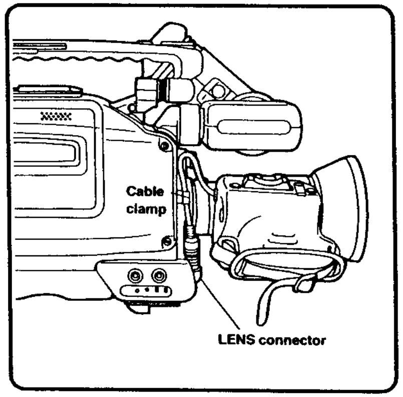
Attachment of Peripheral Units

Attaching the lens

1 **Align the lens with the lens mount on the camera recorder, insert the lens into the mount, and secure it in place using the lens clamp lever.**


Lens clamp lever

2 **Connect the cable to the LENS connector, and secure it in place using the cable clamp.**

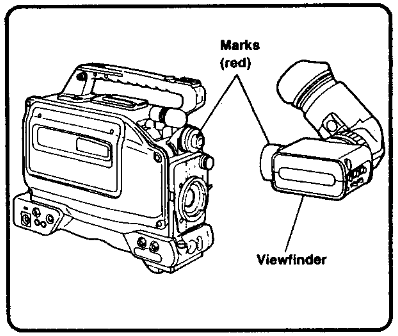

Cable clamp
LENS connector

NOTE

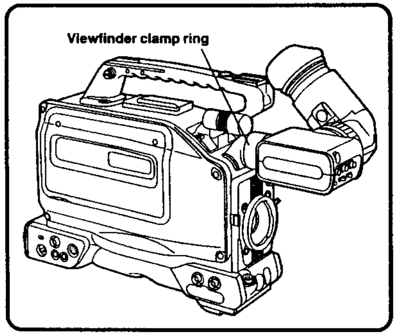
- For details on the handling of the lens, refer to the Operating Instructions accompanying the lens.
  - When the lens has been detached from the camera recorder, attach the lens cap to protect the unit.

Attaching the viewfinder

1 **Align the positions of the marks (red) on the viewfinder and camera recorder, and insert the viewfinder.**

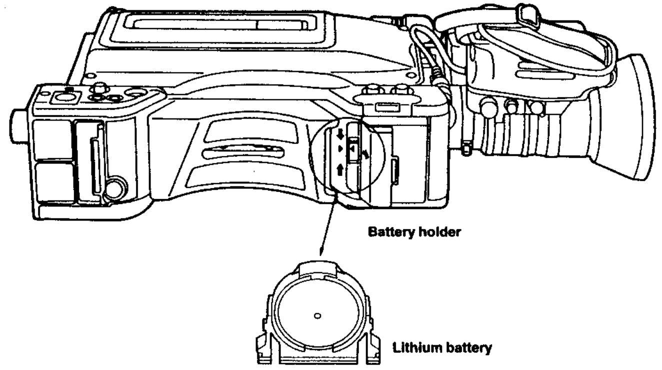

Marks (red)
Viewfinder

2 **Turn the viewfinder clamp ring to clamp the viewfinder in place.**


Viewfinder clamp ring

By loosening the clamp ring, the viewfinder can be rotated by 90°.

Attaching the Backup (Lithium) Battery



1 **Remove the battery holder from the main unit.**

2 **Insert the lithium battery into the battery holder. (Make sure the "+" and "−" polarities are aligned properly.)**

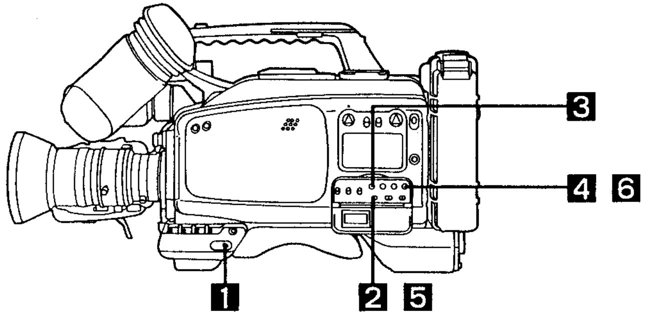
3 **With the triangular marks on the main unit and on the battery holder facing each other, fit the battery holder back into the main unit.**

NOTE

The service life of this battery is approximately one year. When it has mostly discharged, the "BACK UP BATT EMPTY" display will appear in the viewfinder for several seconds when the power switch is set to ON.
Replace with a new lithium battery (Panasonic CR2032).

Initializing the Memory and Setting the Date and Time

When the back-up battery has been replaced, initialize the memory and set the date and time before proceeding with any other operation.



1 **Set the POWER switch to ON.**

2 **When the MENU ON/OFF selector switch is set to ON, the setting screen (MENU) appears in the viewfinder.**

```
    MAIN MENU
 01  EVF DISPLAY
 02  CAMERA SETTING
 03  VTR OPERATION
 04  TIME/DATE
 05  TIME CODE
 06  AUDIO
 07  BATTERY
→08  DIAGNOSIS
 09  MENU INITIALIZATION
 ---END OF DATA---
```

→

```
  - DIAGNOSIS -
 01  ERROR LOG DATA
 02  CYLINDER        1800h
 03  CAMERA Ver  (1.0)1.1
 04  SERVO Ver  A(1.1)
 05  SYSCON  VerB(1.2)

→06  MEMORY  INIT.?

 **PREVIOUS MENU
 ---END OF DATA---
```

3 **While monitoring the viewfinder display, press the SHIFT button until the arrow at the far left is aligned with "DIAGNOSIS".**

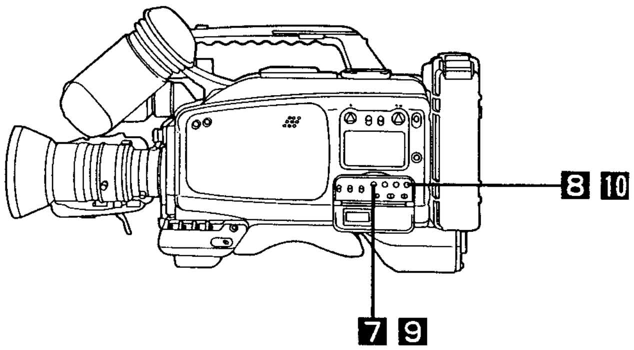
4 **When the START button is pressed, the self-diagnosis (DIAGNOSIS) screen appears.**

5 **Press the SHIFT button until the arrow at the far left is aligned with "MEMORY INIT.?".**

6 **Press the START button.**

"INIT.?" now changes to "INITIALIZED".
The memory initialization is now completed. The next step is to set the date and time. (See next page.)

Initializing the memory and setting the date and time (Continued)



7 Press the SHIFT button until the arrow at the far left is aligned with "PREVIOUS MENU".

```
  - DIAGNOSIS -
 01  ERROR LOG DATA
 02  CYLINDER        1800h
 03  CAMERA Ver   (1.0)1.1
 04  SERVO   Ver  A(1.1)
 05  SYSCON Ver   B(1.2)

 06  MENORY INIT.?

→* *PREVIOUS MENU
 ---END OF DATA---
```

→

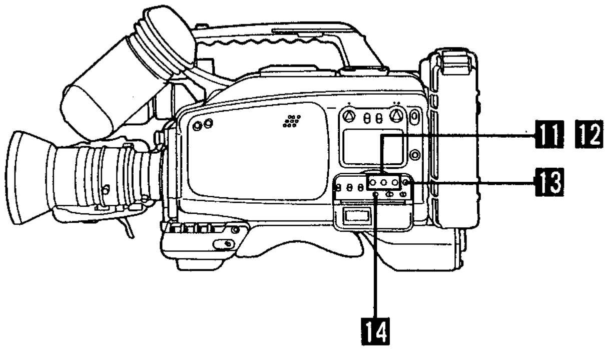
```
    MAIN MENU
 01  EVF DISPLAY
 02  CAMERA SETTING
 03  VTR OPERATION
→04  TIME/DATE
 05  TIME CODE
 06  AUDIO
 07  BATTERY
 08  DIAGNOSIS
 09  MENU INITIALIZATION
 ---END OF DATA---
```

8 When the START button is pressed, the MAIN MENU appears.

9 Press the SHIFT button until the arrow at the far left is aligned with "TIME/DATE".

10 When the START button is pressed, the calender and clock setting screen appears.

```
  - TIME/DATE -
→01  YEAR         94
 02  MONTH        07
 03  DAY          06
 04  HOUR         16
 05  MINUTE       55

  ▪TIME/DATE SET
 * *PREVIOUS MENU
 ---END OF DATA---
```



11 Set the date and time using the SHIFT, SET + and SET – buttons.

12 Press the SHIFT button until the arrow at the far left is aligned with "TIME/DATE SET".

```
  - TIME/DATE -
 01  YEAR         94
 02  MONTH        07
 03  DAY          06
 04  HOUR         16
 05  MINUTE       55

→ ▪TIME/DATE SET
 * *PREVIOUS MENU
 ---END OF DATA---
```

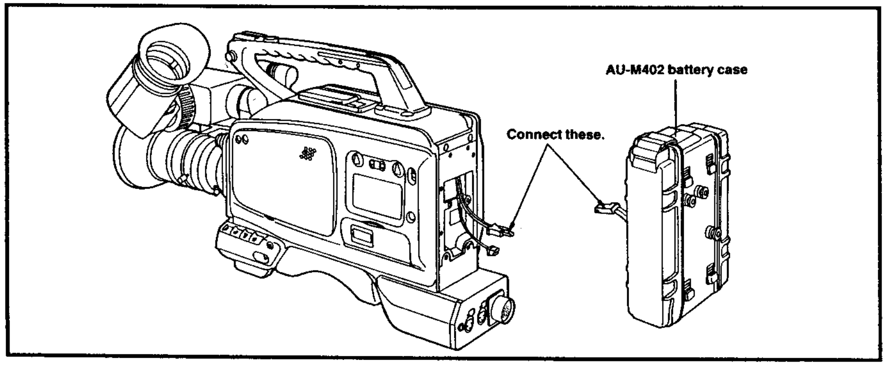
13 When the START button is pressed, the data is entered, and the screen display changes to the MAIN MENU.

14 Finally, set the MENU ON/OFF selector switch to OFF.

Using The AU-BP402 Battery Pack

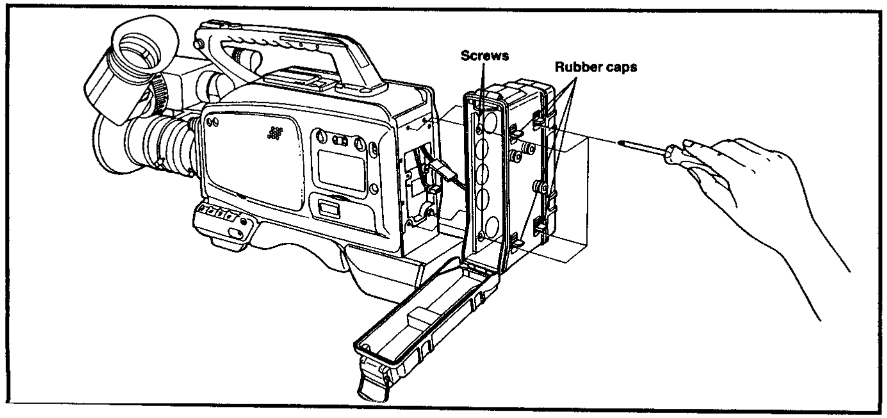
Before using the battery, charge it using the AG-B425 battery charger. It takes about an hour to charge the battery. For further details, refer to the Operating Instructions of the AG-B425 battery charger.

1 Connect the cable from the camera recorder to the cable of the AU-M402 battery case.



2 Use a screwdriver to mount the AU-M402 on the camera recorder.

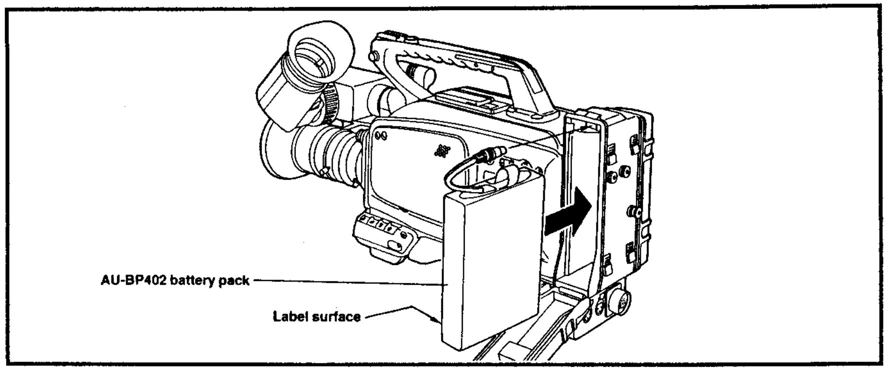
The holes for tightening the screws are visible when the lid is opened and the rubber caps are pulled away. Mount the battery case onto the camera recorder by tightening the screws with a screwdriver. Tighten up the screws as far as they will go.



NOTE

Do not pull the rubber caps too forcefully.

3 Connect the battery pack's plug to the connector inside the battery case, and insert the battery pack into the case.



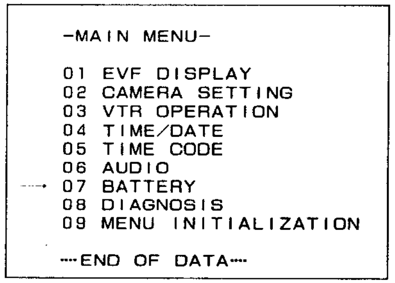
NOTE

Make absolutely sure that the camera recorder's power is off before attempting to connect or disconnect the plug.

4 Set menu item 7 "BATTERY" (battery selection) to "Ni-Cd 12 V".

For further details, refer to "How to set the menu items" (page 50).

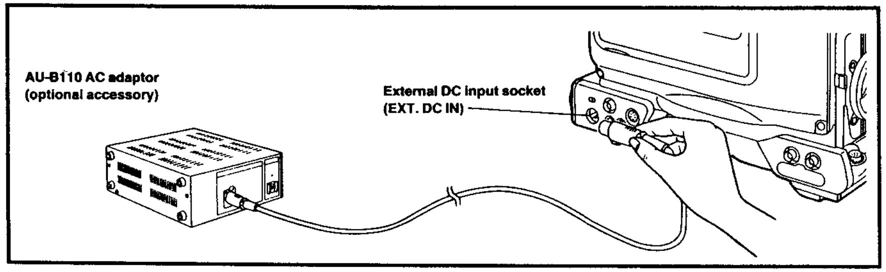
Menu item screen (viewfinder)



```
     -MAIN MENU-

     01 EVF DISPLAY
     02 CAMERA SETTING
     03 VTR OPERATION
     04 TIME/DATE
     05 TIME CODE
     06 AUDIO
---→ 07 BATTERY
     08 DIAGNOSIS
     09 MENU INITIALIZATION

     ---END OF DATA---
```

Using AC Power (With AU-B110 AC Adaptor)

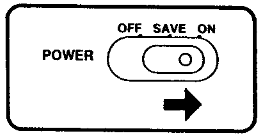
1 Connect the camera recorder's external DC input socket to the DC OUT connector on the AU-B110 AC adaptor.

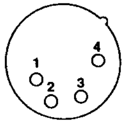

AU-B110 AC adaptor
(optional accessory)
External DC input socket
(EXT. DC IN)

2 Turn on the AC adaptor's power.

3 Set the camera recorder's power switch to ON.

Check the pin signals of the external DC input socket when an external power supply other than the AU-B110 AC adaptor is to be used.


OFF SAVE ON
POWER



Pin No.	Signal
1	GND
2, 3	—
4	H12 V

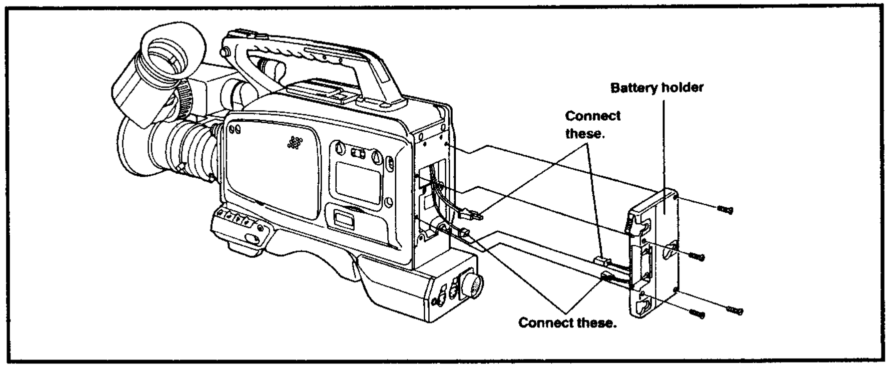
NOTES

- When both the battery pack and AC adaptor have been connected, the power from the AC adaptor has priority in terms of which power is supplied to the camera recorder.
- When the AC adaptor is used, the low battery level warning may appear depending on the battery selection menu setting. In a case like this, it is recommended that "Ni-Cd 12 V" be set on the menu as the battery selected.

Using the Anton Bauer Battery Pack

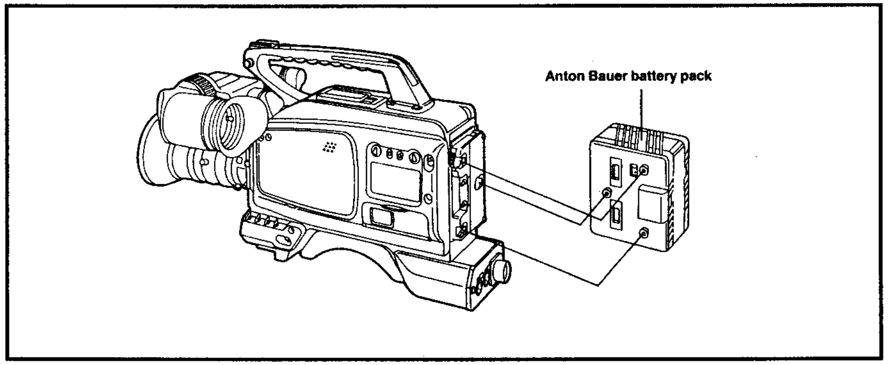
Charging the pack
Before using the battery pack, charge it using the battery charger made by Anton Bauer. For the charging time and other details, refer to the Operating Instructions of the battery charger used.

1 Attach the battery holder using the flat countersunk head screws.


Battery holder
Connect these.
Connect these.

2 Attach the Anton Bauer battery pack.

Insert the pack in the direction shown by the arrow, and then slide it into place.


Anton Bauer battery pack

Using the Anton Bauer Battery Pack (Continued)

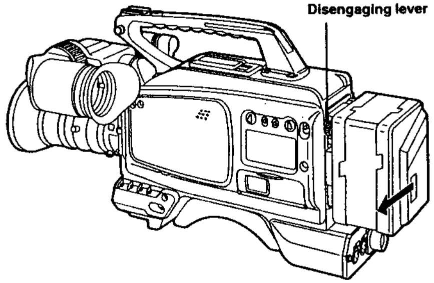
3 Set menu item 7 "BATTERY" (battery selection) to the battery which is going to be used.

For further details, refer to "How to set the menu items" (page 50).

REFERENCE

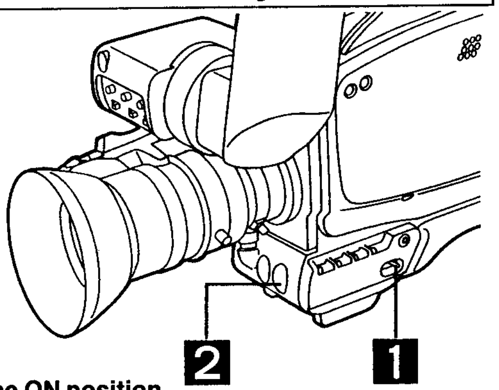
How to remove the battery pack

Pull the disengaging lever on the battery holder all the way down and, while keeping the lever down, slide the battery pack in the direction shown by the arrow.



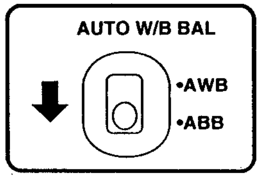
Black Balance & White Balance Adjustments

Black Balance Adjustment



1 Set the POWER switch to the ON position.

2 Press the AUTO W/B BAL switch to the ABB position.



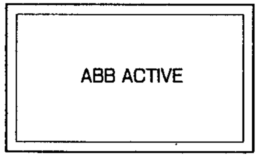


ABB ACTIVE

The black balance adjustment is completed in about 20 seconds, and the adjustment value is automatically stored in the memory.

A display similar to the one shown on the left appears on the viewfinder screen while the adjustment is in progress.

- Upon completion of the black balance adjustment, the display changes to "ABB: OK".
- The "ABB: NG" display appears if it was not possible to adjust the black balance.

NOTES

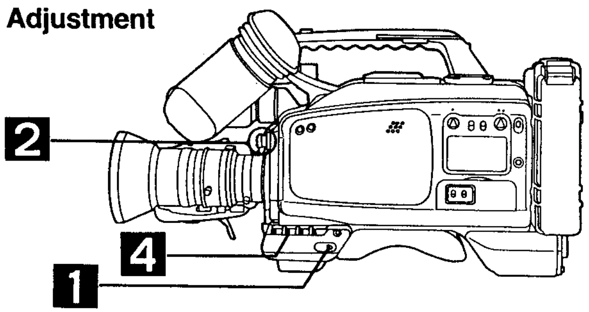
- The camera is automatically shielded from the light while the black balance is being adjusted.
- When the iris is being adjusted manually, return the iris (but only with a lens which is recommended by Panasonic) to a place near its original position after having adjusted the black balance. Start shooting only after the iris has been set to the appropriate value.
- When the AUTO W/B BAL switch is pressed to the ABB position, the gain selection circuit is switched automatically, and flickering appears several times on the screen inside the viewfinder. This is normal and not indicative of a failure.

REFERENCE

- The black balance needs to be adjusted in the following cases only:
  When the camera recorder is to be used for the first time
  When the difference in the ambient temperature has changed greatly
- In the interest of maintaining a high picture quality, it is recommended that the AUTO W/B BAL switch be set to the ABB position immediately before shooting important or memorable scenes.

Black Balance & White Balance Adjustments (Continued)

White Balance Adjustment



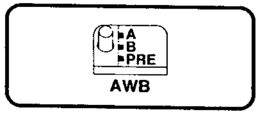
1 Set the POWER switch to the ON position.

2 Use the filter selector control to select the color temperature according to the lighting conditions.

3 When the lens iris is to be operated manually, set it to the suitable value.

Bear in mind that it may not be possible to adjust the white balance if the iris is not set properly. If the lens comes with an automatic iris adjustment mechanism, set the automatic/manual iris selector switch on the lens to the automatic position.

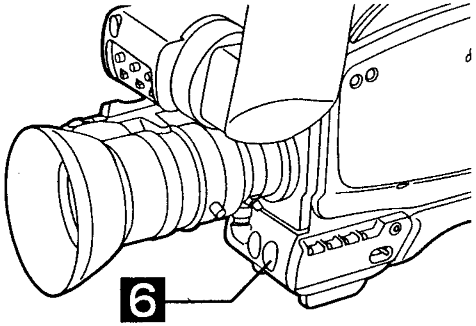
4 Set the AWB selector switch to A or B.



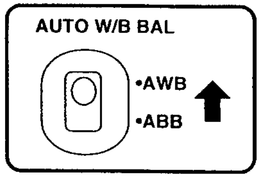
5 Place a white sheet of paper or handkerchief where the conditions are the same as for the light source illuminating the subject, zoom in and shoot the white on the screen.

A white object (sheet, cloth or wall, etc.) near the subject can be used instead but bear in mind that the object appearing to be white may not be perfectly white.

AUTO W/B BAL switch



6 Shoot a white object so that it is virtually at the center of the screen and occupies an area equivalent to at least one-fourth of the height and width of the screen, and set the AUTO W/B BAL switch to AWB.



AWB : ACTIVE

The white balance adjustment is completed in about a second.
The adjustment value is stored in memory A or B.

The display shown on the left appears on the viewfinder screen while the adjustment is in progress.

- Upon completion of the white balance adjustment, the display changes to "AWB: OK".
- The "AWB: NG" display appears if it was not possible to adjust the white balance.

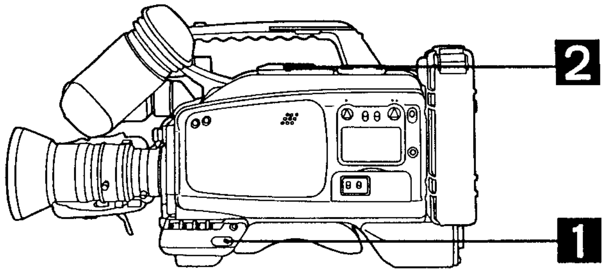
NOTES

- Since hunting may occur when a zoom lens equipped with an automatic iris adjustment mechanism is used, adjust the iris gain control provided on the lens.
  For further details, refer to the Operating Instructions of the lens.
- The white balance cannot be adjusted if the AWB selector switch is set to PRE.
  The switch has been adjusted in such a way that the white balance is achieved at 3200 K. When the filter selector control is set to "1", the proper white balance at 3200 K is achieved. All that now needs to be done is adjust the black balance.
- Since the lightest part of what appears on the screen is taken to be "white" for the adjustment of the white balance, do not allow any object lighter than the white object shot in step 6 above to appear on the screen. Incorrect operation may otherwise result.

REFERENCE

In the interest of maintaining a high picture quality, it is recommended that the AUTO W/B BAL switch be set to the AWB position immediately before shooting important or memorable scenes.

Normal Recording



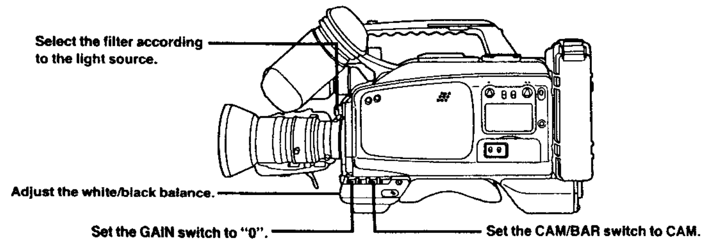
1 Set the POWER switch to the ON position.

2 Press the EJECT button to open the cassette compartment.

3 Insert the cassette tape.

- Before inserting the tape, make sure that the accidental erasure prevention tab on the cassette has not been broken out.
- Do not use a 180-minute tape.

4 Set the camera's switches as follows.


Select the filter according to the light source.
Adjust the white/black balance.
Set the GAIN switch to "0".
Set the CAM/BAR switch to CAM.

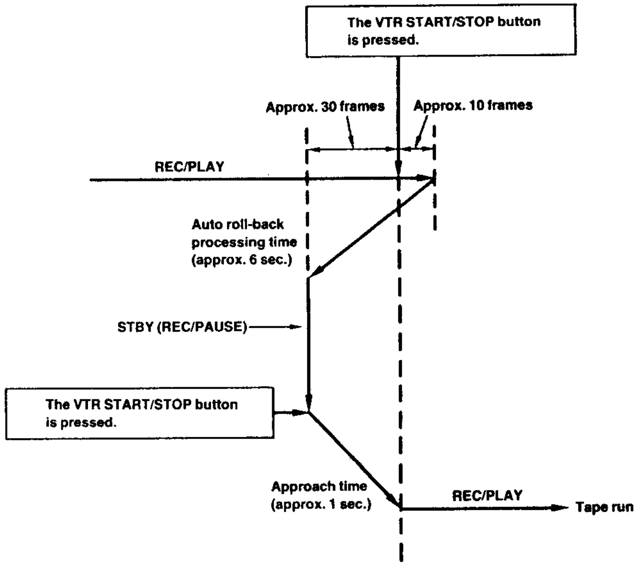
5 Point the camera at the subject, and adjust the focus and zoom.

6 Press the VTR START/STOP button to start the recording.

The REC tally lamp inside the viewfinder keeps on flashing until the recording mode is established. Once recording commences, it stops flashing and remains lighted.

7 Press the VTR START/STOP button to suspend the recording.

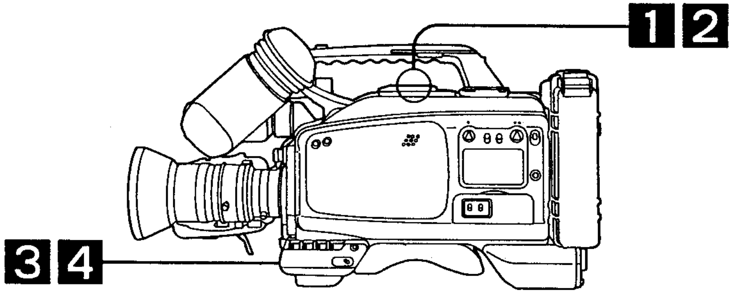
When the recording is suspended as shown in the figure below, the tape is rewound by about 30 frames and the rec pause mode is established. When the recording is resumed, recording commences where the previous recording will be slightly overlapped.


The VTR START/STOP button is pressed.
Approx. 30 frames
Approx. 10 frames
REC/PLAY
Auto roll-back processing time (approx. 6 sec.)
STBY (REC/PAUSE)
The VTR START/STOP button is pressed.
Approach time (approx. 1 sec.)
REC/PLAY
Tape run

Simple Editing

Simple editing function

This refers to the pre-edited shooting function with which the recording of each cut is started from the pause (still picture) mode to ensure continuity.



Operation

1 **Press the PLAY button.**

The playback picture mode is established.

2 **Press the PLAY button again where the new cut is to be joined onto the existing recording.**

The still picture mode is established.

3 **Press the VTR START/STOP button.**

The rec pause mode is established.

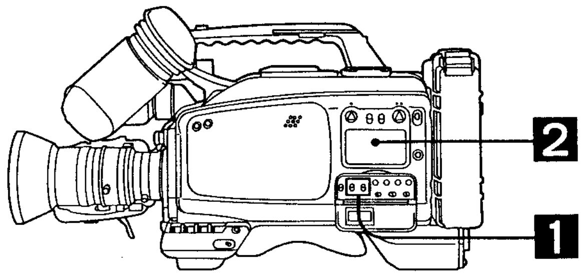
4 **To start the recording, press the VTR START/STOP button again.**

Recording now starts.

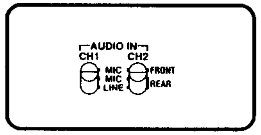
NOTE

If the VTR is kept in the still picture mode for about 5 minutes, it is automatically placed in the stop mode. Bear in mind that smooth continuity between cuts cannot be guaranteed when recording is started from the stop mode.

Audio Recording



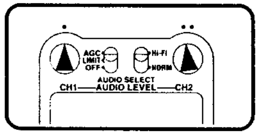
1 **Select the desired input signals using the audio input selector switches.**

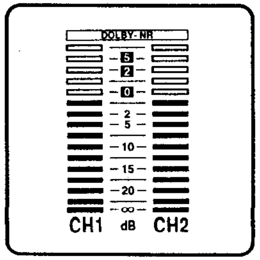


The same sound is input for normal audio and Hi-Fi audio.

When the built-in microphone is used ➔	FRONT MIC
When an external microphone is used ➔	REAR MIC
When line audio signals are input ➔	REAR LINE

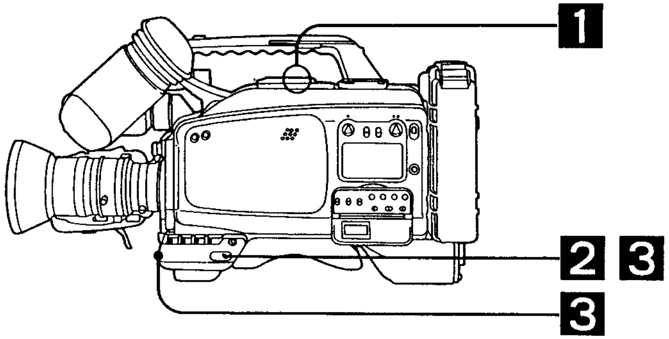
2 **Turn the audio level controls clockwise or counterclockwise and adjust them so that the audio signal levels indicated on the display's level meter are brought to the standard positions.**





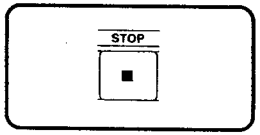
- The audio signal levels can be adjusted when the AUDIO AGC switch is OFF. If this switch is ON, the signals will be automatically adjusted to more or less the appropriate levels regardless of the audio level control settings.
- Howling may occur if the volume of the audio monitor speaker is turned up high. If this occurs, turn the audio monitor level control and lower the volume to a level at which howling does not occur.
  - •When the AUDIO AGC switch is at LIMIT, the limiter will be automatically activated when the input level of the signals is excessively high. Therefore, first adjust the level with the switch at OFF and then return the switch to LIMIT just in case excessively high input signals are supplied.

Power Save Mode



When the camera's DC POWER switch is set to SAVE, the VTR is set to the power save mode.

1 Set the VTR to the stop, eject or rec pause mode.



2 Set the POWER switch to SAVE.

The VTR is now set to the power save mode. In this mode, the drum stops rotating, the tape stops where it has wound around the drum. The backlight for the display's counter is also turned off, and only the picture on the screen remains.

3 To resume recording, set the POWER switch to ON, and after waiting for about 5 seconds, press the camera's VTR START/STOP button.

NOTE

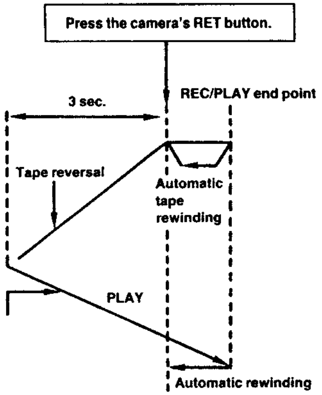
Until the drum rotation has stabilized (which takes about 5 seconds), recording will not commence even when the camera's DC POWER switch has been set to ON.

Reference

The VTR can be started in the power save mode but it takes a little more time for recording to commence.

Rec Review

When the camera's RET button is pressed with the VTR in the rec pause mode (which is established after the tape has finished automatically reversing), the rec review operation is performed, enabling what has already been recorded to be checked.



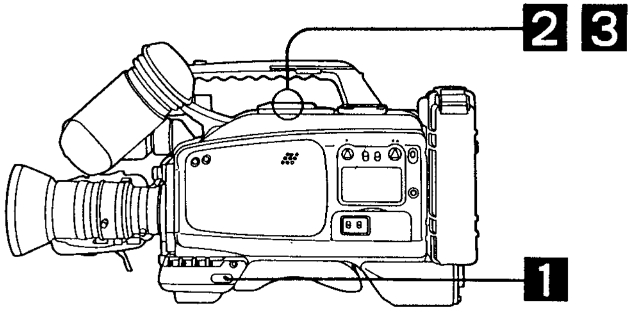
The playback pictures are shown in the viewfinder while the tape is playing back in the rec review mode.

<When the area near the rec review start point has not been recorded>
The playback pictures of the unrecorded part of the tape are shown in the viewfinder.

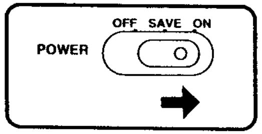
NOTE

The rec review operation is not repeated even when the rec RET button remains depressed.

Playback

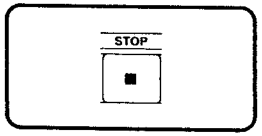


1 Set the POWER switch to the ON position.



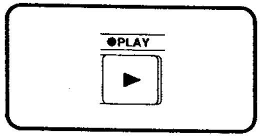
The tape is automatically loaded onto the cylinder, the REC, PLAY and PAUSE lamps come on, and the camera recorder is set to the recording pause mode.

2 Press the STOP button.



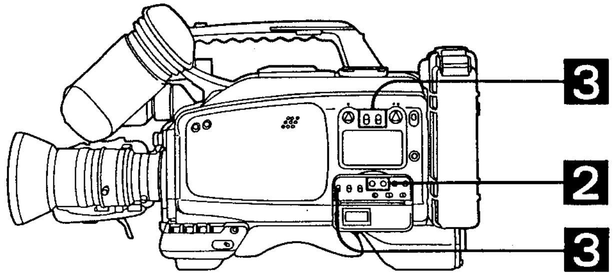
During rec/play, the VTR will not be set to the stop mode even when the STOP button is pressed. Press the VTR START/STOP button first to suspend the recording and then press the STOP button.

3 Press the PLAY button.



Noise will appear for an instant on the playback picture when the mode is transferred from STOP to PLAY. This is normal and not indicative of malfunctioning.

4 The playback pictures appear on the viewfinder and on a TV monitor which has been connected to the camera recorder.

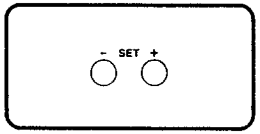


1 Automatic S-VHS/VHS identification and playback

This camera recorder's playback circuitry is designed to identify the cassette's recording system automatically.

Recording system	S-VHS display
S-VHS	On
VHS	Off

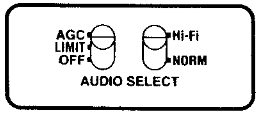
2 Tracking

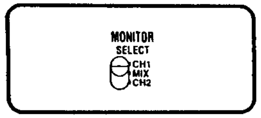


If noise should appear during playback, adjust the SET + and SET – buttons until the picture is restored to normal.

- It may not be possible to eliminate the noise adequately on a tape which was recorded on another VTR.
- The tracking adjustment remains effective until the tape is ejected. (When the tape is ejected, the tracking value which was set before the camera recorder was shipped from the manufacturing plant is restored.)
- The tracking value which was set before the camera recorder was shipped from the manufacturing plant can be restored by pressing the SET + and SET – buttons simultaneously.

3 AUDIO SELECT switch



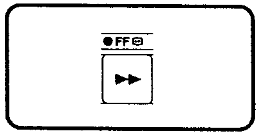


This switch can be used to select normal audio or Hi-Fi audio for the audio output signals.
The sound heard through the monitor speaker can be set to CH1, MIX or CH2 by the audio monitor selector switch.

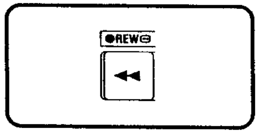
Playback (Continued)

4 Cue and Review Playback

1 When the FF button is kept depressed during tape play, the tape is cued at approximately 5 times the normal tape speed.



2 When the REW button is kept depressed during tape play, the tape is reviewed at approximately 5 times the normal tape speed.



- The noise as shown in Fig. 1 or Fig. 2 appears during cue or review playback.
- The image may appear as shown in Fig. 3 or its top part may appear distorted: this is normal and not indicative of a failure.

Noise appearing during cue

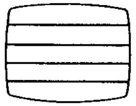


Fig. 1

Noise appearing during review

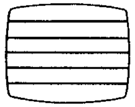


Fig. 2

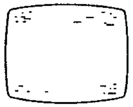
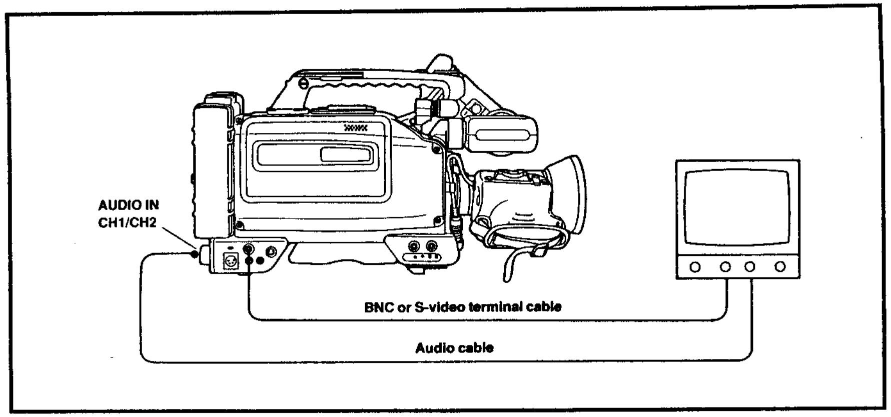


Fig. 3

- If the image slips vertically up or down the screen, adjust the TV's horizontal hold.
- Alternatively, the colors may keeping disappearing and re-appearing: this is normal and not indicative of a failure.

Monitoring

Connect the units as shown in the figure below to monitor the picture and sound.
- E-E images can be monitored during recording.

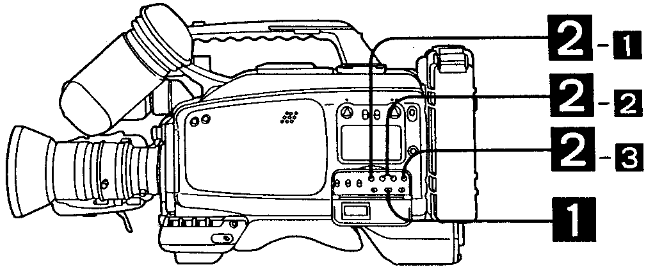


The sound can also be monitored through the built-in speaker.

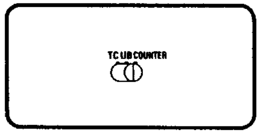
NOTE

Use the VIDEO OUT connector on the camera to monitor the camera's E-E images during playback.

Time Code Generator Settings



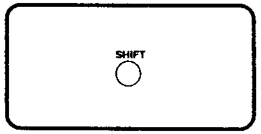
1 Set the TC/UB/COUNTER selector switch to TC or UB.



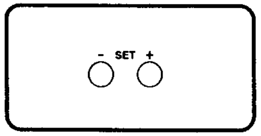
- When the switch is set to TC, the time code data will be set.
- When the switch is set to UB, the user bit data will be set.

2 Set the data.

1 Press the SHIFT button.

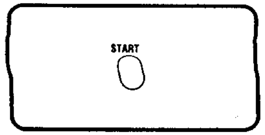


2 To change the flashing number, press the SET + or SET − button.



If the RESET button is pressed at this stage, the data is cleared to zero and the setting mode is released.

3 After the data has been set, press the START button.



The data will not be set if the TC/UB/COUNTER selector switch is now set to a different position without the START button having first been pressed.

REFERENCE

- The drop frame or non-drop frame mode can be selected for the time code by the menu item. For further details, refer to "How to set the menu items" (page 53).
- **REC RUN and FREE RUN positions of REC/FREE selector switch**

REC RUN: The time code is counted only when the VTR is in the recording mode. The count commences at the same time as the recording starts, and it stops at the same time as the recording ends. The time code is continuous for automatic editing (pre-edit shooting) if LTC is ON (refer to the section on the menu items).

FREE RUN: The time code is counted continuously all the time regardless of the VTR's operation mode. When the generator is synchronized with a standard clock (refer to the section on the menu items), the recording time can be recorded onto the tape.

- **Drop frame (DF) and non-drop frame (NDF) modes**

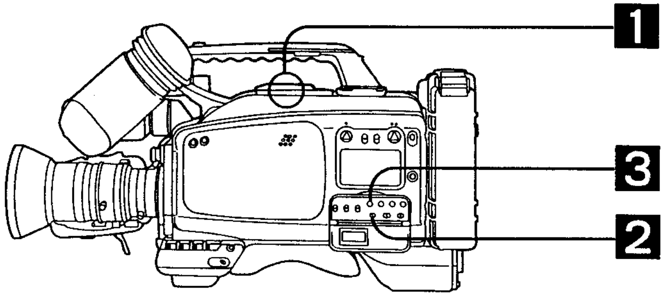
Drop frame: In order to compensate for the discrepancy occurring between the color synchronization and actual time over a long time duration, two frames (00 and 01) are skipped from the start of each full minute except at the 0-, 10-, 20-, 30-, 40- and 50-minute mark.

00:00:59:29 ⇨ 00:01:00:02

Non-drop frame: The time code is counted up with the time code signals left untouched.

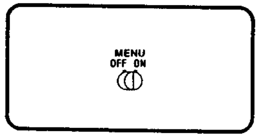
00:00:59:29 ⇨ 00:01:00:00

How to Set the Menu Items



1 Set the camera recorder to the eject, rec pause or stop mode.

2 Set the MENU ON/OFF selector switch to ON.

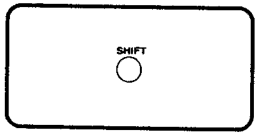


The main menu screen appears on the viewfinder.

Viewfinder

```
      -MAIN MENU-
→01 EVF DISPLAY
 02 CAMERA SETTING
 03 VTR OPERATION
 04 TIME/DATE
 05 TIME CODE
 06 AUDIO
 07 BATTERY
 08 DIAGNOSIS
 09 MENU INITIALIZATION
 ···· END OF DATA ····
```

3 Press the SHIFT button to select the desired menu item.

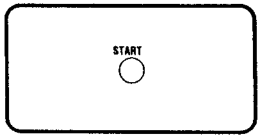


The cursor on the left of the main menu moves down the menu.

Viewfinder

```
      -MAIN MENU-
 01 EVF DISPLAY
→02 CAMERA SETTING
 03 VTR OPERATION
 04 TIME/DATE
 05 TIME CODE
 06 AUDIO
 07 BATTERY
 08 DIAGNOSIS
 09 MENU INITIALIZATION
 ···· END OF DATA ····
```

4 Press the START button.

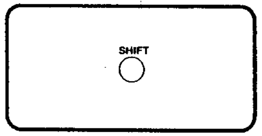


The main menu screen is replaced by the sub menu screen.

Viewfinder

```
        -EVF DISPLAY-
→01 LEVEL METER         ON
 02 F NUMBER            ON
 03 BATTERY VOLTAGE     ON
 04 VTR STATUS         OFF
 05 TIME DATA          BAR
 06 SAFETY ZONE         ON
 ····END OF DATA····
```

5 Press the SHIFT button to select a sub menu item.

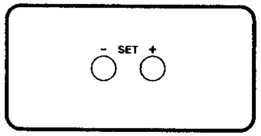


The cursor on the left of the sub menu moves down the menu.

Viewfinder

```
        -EVF DISPLAY-
→01 LEVEL METER         ON
 02 F NUMBER            ON
 03 BATTERY VOLTAGE     ON
 04 VTR STATUS         OFF
 05 TIME DATA          BAR
 06 SAFETY ZONE         ON
 ····END OF DATA····
```

6 Press the SET + or SET − button to change the data setting.

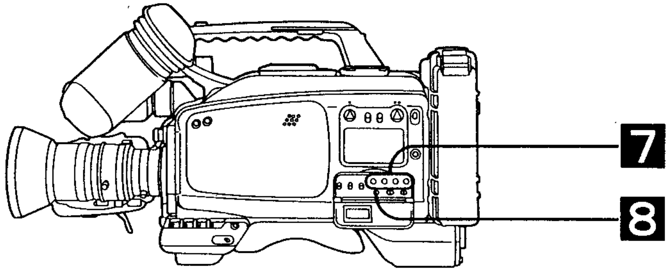


The setting of the sub menu item with the cursor is changed.

Viewfinder

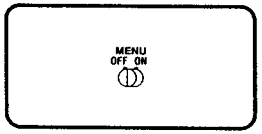
```
        -EVF DISPLAY-
 01 LEVEL METER         ON
→02 F NUMBER           OFF
 03 BATTERY VOLTAGE     ON
 04 VTR STATUS         OFF
 05 TIME DATA          BAR
 06 SAFETY ZONE         ON
 ····END OF DATA····
```

How to Set the Menu Items (Continued)



7 **To return to the main menu and perform settings on another menu item, press the SHIFT button to move the cursor (arrow) to the previous menu, and press the START button.**

8 **To exit from the menu settings, set the MENU ON/OFF selector switch to OFF.**



NOTE

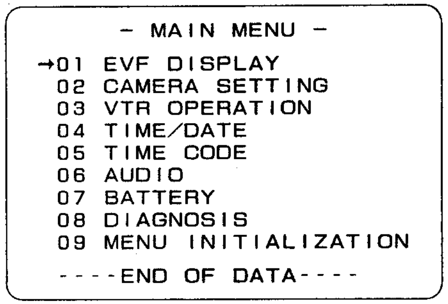
When the camera's START/STOP button is pressed at any time while menu settings are performed, the menu setting process is suspended and recording is commenced. (In this case, scenes may be recorded without the menu settings having been performed properly.)

Menu Items

MAIN MENU

Viewfinder main menu item	Functions
EVF DISPLAY	EVF display ON/OFF setting
CAMERA SETTING	Camera settings
VTR OPERATION	VTR operation-related setting
TIME/DATE	Date/time settings
TIME CODE	Time code-related settings
AUDIO	Audio control items
BATTERY	Battery selection
DIAGNOSIS	Self-diagnosis items and initialization after replacement of back-up battery
MENU INITIALIZATION	Return to factory default menu settings

Display on EVF or at LINE OUT connector of VTR



```
      - MAIN MENU -
→01 EVF DISPLAY
 02 CAMERA SETTING
 03 VTR OPERATION
 04 TIME/DATE
 05 TIME CODE
 06 AUDIO
 07 BATTERY
 08 DIAGNOSIS
 09 MENU INITIALIZATION
 ----END OF DATA----
```

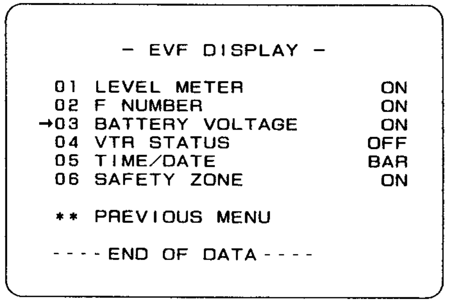
Menu Items (Continued)

EVF DISPLAY Menu

Underlining denotes the mode set as the default.

Viewfinder sub menu item	Mode set	Functions
LEVEL METER	ON OFF	Sets audio level meter display on EVF ON or OFF. ON: Display is ON. OFF: Display is OFF.
F NUMBER	ON OFF	Sets f (iris f) number display on EVF ON or OFF. ON: Display is ON. OFF: Display is OFF.
BATTERY VOLTAGE	ON OFF	Sets battery voltage display on EVF ON or OFF. ON: Display is ON. OFF: Display is OFF.
VTR STATUS	ON OFF	Sets VTR status display on EVF ON or OFF. ON: Display is ON. OFF: Display is OFF.
TIME DATE	ON BAR OFF	Sets date and time display on EVF ON or OFF. ON: Display appears all the time. BAR: Display is ON only with OFF color bar signals. OFF: Display is OFF.
SAFETY ZONE	ON OFF	Sets safety zone display on EVF ON or OFF ON: Display is ON. OFF: Display is OFF.

Example of display on EVF or at LINE OUT connector of VTR



```
          - EVF DISPLAY -

   01 LEVEL METER             ON
   02 F NUMBER                ON
 →03 BATTERY VOLTAGE          ON
   04 VTR STATUS             OFF
   05 TIME/DATE              BAR
   06 SAFETY ZONE             ON

   ** PREVIOUS MENU

   ----END OF DATA----
```

NOTE

Even when the mode is set to ON on the EVF DISPLAY menu, no characters will appear if the CHARACTER ON/OFF switch on the front panel of the viewfinder has been set to the OFF position.

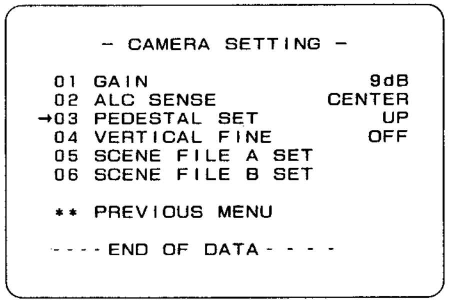
CAMERA SETTING Menu

Underlining denotes the mode set as the default.

Viewfinder sub menu item	Mode set	Functions
GAIN	9 dB 18 dB 24 dB SUPER HIGH	Sets gain value when GAIN selector (toggle) switch at front of camera recorder has been set to HIGH.
ALC SENSE	CENTER NORMAL	Selects ALC (auto lens iris control) light level metering system. CENTER: Screen center priority light level metering. NORMAL: Uniform light level metering over virtually the entire screen.
PEDESTAL SET	No display UP DOWN PRESET	Adjusts pedestal. (Refer to the procedure for the PEDESTAL SET operation on the next page.) No display: No change in pedestal. UP: Raises pedestal level. DOWN: Lowers pedestal level. PRESET: Returns the pedestal level to its default setting.
VERTICAL FINE	OFF ON	OFF: Normal mode ON: Doubles the resolution in the perpendicular direction but lag is increased.
SCENE FILE A SET		Sets scene file A (*1).
SCENE FILE B SET		Sets scene file B (*1).

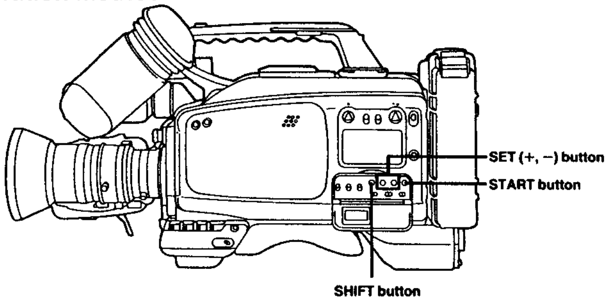
(*1) There are 7 scene files but only files A and B are available for the user to set.

Example of display on EVF or at LINE OUT connector of VTR



```
         - CAMERA SETTING -

   01 GAIN                   9dB
   02 ALC SENSE           CENTER
 →03 PEDESTAL SET             UP
   04 VERTICAL FINE          OFF
   05 SCENE FILE A SET
   06 SCENE FILE B SET

   ** PREVIOUS MENU

   ----END OF DATA----
```

PEDESTAL SET operation method



1 **Align the arrow with the "03 PEDESTAL SET" position.**

2 **Press the SET + or SET – button to align the position.**

- While the SET + button is kept depressed, the UP display appears and the pedestal level is increased.
- While the SET – button is kept depressed, the DOWN display appears and the pedestal level is reduced.
- When the SET + and SET – buttons are pressed together, the PRESET display appears, and the pedestal level is returned to its default setting.

Scene file settings

```
    MAIN MENU
 01  EVF DISPLAY
→02  CAMERA SETTING
 03  VTR OPERATION
 04  TIME/DATE
 05  TIME CODE
 06  AUDIO
 07  BATTERY
 08  DIAGNOSIS
 09  MENU INITIALIZATION
 ---END OF DATA---
```

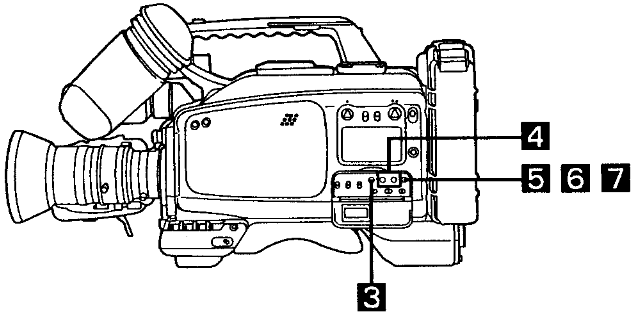
→

```
  – CAMERA SETTING –
 01  GAIN            9dB
 02  ALC SENSE    CENTER
 03  PEDESTAL         UP
 04  VERTICAL FINE   OFF
→05  SCENE FILE A SET
 06  SCENE FILE B SET


 * *PREVIOUS MENU
 ---END OF DATA---
```

1 **Press the SHIFT button on the MAIN MENU screen, and press the START button when the arrow at the far left is aligned with "02 CAMERA SETTING". The CAMERA SETTING screen now appears.**

2 **Press the SHIFT button in the same way, and press the START button when the arrow is aligned with "05 SCENE FILE A SET" or "06 SCENE FILE B SET". Page 1 of the scene file setting screen now appears.**

- Before proceeding with the scene file settings, use the SCENE FILE switch to set SCENE FILE A or B.



3 **Press the SHIFT button to align the arrow on the far left with the item to be set.**

```
  – SCENE FILE A –PAGE 1
 01  H DTL            10
 02  H DTL FREQ        1
 03  V DTL A           0
→04  LEVEL DEP I      31
 05  DARK DTL         ON
 06  CORING           10
 07  CHROMA DTL       16

 * *PREVIOUS MENU
   PAGE 2:PUSH START
```

→

```
 – SCENE FILE B –  PAGE 2
 08  C GAIN 1       -128
 09  C GAIN 2          0
 10  C PHASE 1      +127
 11  C PHASE 2       +10



→ •DATA SAVE
 * *PREVIOUS MENU
   PAGE 1:PUSH START
```

4 **Press the SET + or SET – button to change the data to be set.**

- Pressing the SET + button increases the data setting.
- Pressing the SET – button decreases the data setting.
- Keeping either button depressed enables the data to be changed continuously.

5 **When the START button is pressed, page 2 of the scene file setting screen appears.**
The data settings can be changed in the same way as for page 1.

6 **Data back-up**

- Align the arrow with DATA SAVE, and press the START button.
- When this step is not performed, the data settings are valid only while the power is supplied. Once the power has been turned off, the settings will be lost and the past data will be restored.

7 **When the START button is pressed, page 1 of the scene file setting screen appears.**

Menu Items (Continued)

Scene File Menu

Viewfinder sub menu item	Mode set	Functions
H DTL	Range of variation: 0 to 31	Selects reduced boosting frequency gain of horizontal band-pass filter for horizontal aperture. Default setting: 14
H DTL FREQ	Range of variation: 1 to 4	Selects reduced boosting frequency of horizontal band-pass filter for horizontal aperture. Default setting: 2
V DTL	Range of variation: 0 to 31	Selects gain of vertical aperture. Default setting: 8
LEVEL DEP	Range of variation: 0 to 31	Selects level dependent dark section offset. Default setting: 4
DARK DTL	ON OFF	Selects level dependent dark boost ON or OFF. Default setting: OFF
CORING	Range of variation: 0 to 31	Selects positive/negative peak clipping of coring for the horizontal/vertical aperture input supplied. Default setting: 1
CHROMA DTL	Range of variation: 0 to 15	Selects chroma aperture gain. Default setting: 0
C GAIN 1	Range of variation: -128 to +127	Selects color temperature compensation factor. Default setting: +88
C GAIN 2		Default setting: +112
C PHASE 1		Default setting: -14
C PHASE 2		Default setting: -38
DATA SAVE		Selects the data settings for writing on the camera's EEPROM. • The data settings are backed up by this operation. • If this operation is not performed, the unit will operate using the levels selected while power is supplied to it but when the power is switched off, the data will be cleared.

VTR OPERATION Menu

Underlining denotes the mode set as the default.

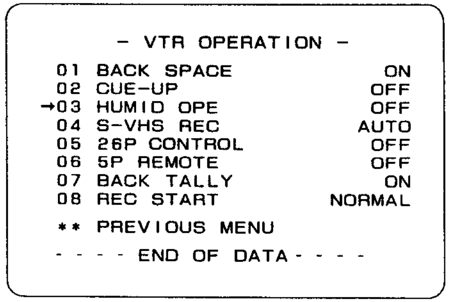
Viewfinder sub menu item	Mode set	Functions
BACK SPACE (pre-edit shooting)	ON OFF	Selects whether auto editing is to be performed. ON: Auto editing is performed. OFF: Auto editing is not performed.
CUE-UP (program search)	ON OFF	Selects whether auto cue-up is to be performed. ON: Auto cue-up is performed. OFF: Auto cue-up is not performed.
HUMID OPE (recording condensation)	DISABLE ENABLE	Selects the VTR operation when condensation has formed. DISABLE: When condensation has formed, all operations except Power switch ON/OFF and tape ejection are prohibited to protect the VTR and its tape. ENABLE: Even when condensation has formed, operations are accepted as usual.
S-VHS REC	AUTO VHS	AUTO: Tape format is automatically identified, and recording is performed in Super VHS mode when S-VHS tape is employed. VHS: Recording is forcibly performed in VHS mode.
26P CONTROL	OFF BOTH ON	OFF: No 26P VTR control. (Camera recorder only) BOTH: This unit and the 26P VTR are controlled at the same time (tally LED displays REC mode of camera recorder). ON: Only the VTR is controlled (tally LED displays REC mode of 26P VTR). To place camera recorder in REC or REC PAUSE mode, press START/STOP button while holding down RESET button.
5P REMOTE	ON OFF	Sets 5P remote control ON or OFF. ON: 5P remote control possible. OFF: 5P remote control not possible. **Note:** "5P REMOTE" refers to signals which will be used at some future point in time.
BACK TALLY	ON OFF	Selects whether back tally indicator (LED) is to light. ON: Indicator lights. OFF: Indicator does not light.
REC START	ALL NORMAL	ALL: Accepts recording regardless of the VTR mode. NORMAL: The operation of the VTR START/STOP button is accepted only when the VTR is in the stop (power save), rec pause or still mode.

NOTE

"HUMID OPE ENABLE" is an extremely risky mode to set in that in this mode VTR operation is continued even if the condensation sensor detects the formation of condensation inside the unit. Since in such a state the tape may wind itself around some of the parts inside the VTR, this mode should be used only when recording is worth the risk. (The manufacturer will not be held liable for any damage which may result from operation in this mode.)

Menu Items (Continued)

Example of display on EVF or at LINE OUT connector of VTR



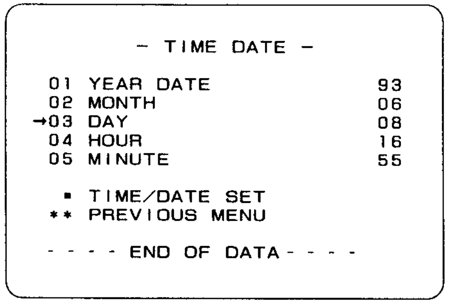
```
        - VTR OPERATION -
 01 BACK SPACE              ON
 02 CUE-UP                 OFF
→03 HUMID OPE              OFF
 04 S-VHS REC             AUTO
 05 26P CONTROL            OFF
 06 5P REMOTE              OFF
 07 BACK TALLY              ON
 08 REC START           NORMAL
 ** PREVIOUS MENU
 - - - - END OF DATA - - - -
```

TIME/DATE Menu

Underlining denotes the mode set as the default.

Viewfinder sub menu item	Mode set	Functions
YEAR	Setting: 00–99	Sets the "year" of the date.
MONTH	Setting: 01–12	Sets the "month" of the date.
DAY	Setting: 01–31	Sets the "day" of the date.
HOUR	Setting: 00–24	Sets the "hours" of the time. (24-hour system)
MINUTE	Setting: 00–59	Sets the "minutes" of the time.

Example of display on EVF or at LINE OUT connector of VTR



```
         - TIME DATE -
 01 YEAR DATE              93
 02 MONTH                  06
→03 DAY                    08
 04 HOUR                   16
 05 MINUTE                 55

  ▪ TIME/DATE SET
 ** PREVIOUS MENU

 - - - - END OF DATA - - - -
```

1 Setting method

1 Press the SHIFT button to align the arrow with the menu item to be set.

2 Change the data using the SET + and SET – buttons.
Keeping either button depressed changes the data continuously.

3 To set the clock:
1) Press the SHIFT button to align the arrow with TIME/DATE SET.
2) Press the START button. The clock is now set and the menu screen returns to the MAIN MENU.

4 When the clock is not to be set:
Select PREVIOUS MENU to return to the MAIN MENU or set the MENU ON/OFF switch to OFF to release the menu setting mode.

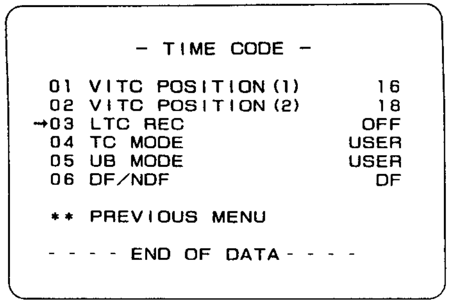
TIME CODE Menu

Underlining denotes the mode set as the default.

Viewfinder sub menu item	Mode set	Functions
VITC POSITION (1)	11H 12H 13H 14H 15H 16H 17H 18H 19H	Sets line in which VITC signal is to be inserted. 11H: VITC signal is inserted in line 11. 12H: VITC signal is inserted in line 12. 13H: VITC signal is inserted in line 13. 14H: VITC signal is inserted in line 14. 15H: VITC signal is inserted in line 15. 16H: VITC signal is inserted in line 16. 17H: VITC signal is inserted in line 17. 18H: VITC signal is inserted in line 18. 19H: VITC signal is inserted in line 19.
VITC POSITION (2)	11H 12H 13H 14H 15H 16H 17H 18H 19H	Sets line in which VITC signal is to be inserted. 11H: VITC signal is inserted in line 11. 12H: VITC signal is inserted in line 12. 13H: VITC signal is inserted in line 13. 14H: VITC signal is inserted in line 14. 15H: VITC signal is inserted in line 15. 16H: VITC signal is inserted in line 16. 17H: VITC signal is inserted in line 17. 18H: VITC signal is inserted in line 18. 19H: VITC signal is inserted in line 19. *The same line as that set for VITC POSITION (1) cannot be selected.
LTC REC	ON OFF	Sets whether LTC signal is to be recorded on audio linear track (CH2). ON: LTC signal is recorded. OFF: LTC signal is not recorded. When LTC REC is set ON and REC/FREE selector switch is set to REC, REGEN operation is performed by time code generator.
TC MODE	USER REAL	Sets time code (time data) when FREE RUN/REC RUN selector switch at front of camera recorder is set to FREE RUN. USER: Free-run operation is performed on basis of user setting. REAL: Real-time; free-run operation is performed on basis of time which was set on TIME DATE menu.
UB MODE	USER REAL SCENE	Selects UB operation method. USER: User setting (fixed) REAL: Real-time; UB real-time operation is performed on basis of time which was set on TIME DATE menu. SCENE: Present UB value is automatically incremented for each cut.
DF/NDF	DF NDF	Sets DF or NDF mode for time code. DF: Drop frame mode NDF: Non-drop frame mode

Menu Items (Continued)

Example of display on EVF or at LINE OUT connector of VTR



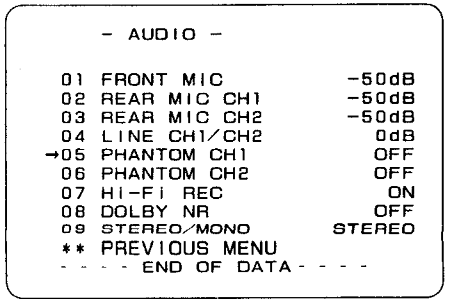
```
        - TIME CODE -

 01 VITC POSITION(1)        16
 02 VITC POSITION(2)        18
→03 LTC REC                OFF
 04 TC MODE               USER
 05 UB MODE               USER
 06 DF/NDF                  DF

 ** PREVIOUS MENU

 - - - - END OF DATA - - - -
```

AUDIO Menu

Underlining denotes the mode set as the default.

Viewfinder sub menu item	Mode set	Functions
FRONT MIC (Front mic level)	−40 dB −50 dB −60 dB	Selects camera's mic input level.
REAR MIC CH1 (Rear mic CH1 level)	−40 dB −50 dB −60 dB	Selects mic input level from AUDIO CH1 input connector in jack section.
REAR MIC CH2 (Rear mic CH2 level)	−40 dB −50 dB −60 dB	Selects mic input level from AUDIO CH2 input connector in jack section.
LINE CH1/CH2	+4 dB 0 dB −6 dB	Selects LINE input level from AUDIO CH1/CH2 input connectors in jack section.
PHANTOM CH1 (Phantom CH1 power)	ON OFF	Selects whether phantom mic (CH1) is to be used. ON: Phantom mic (+48 V) is used. OFF: Normal mic is used.
PHANTOM CH2 (Phantom CH2 power)	ON OFF	Selects whether phantom mic (CH2) is to be used. ON: Phantom mic (+48 V) is used. OFF: Normal mic is used.
HI-FI REC	ON OFF	Selects whether Hi-Fi audio is to be recorded. ON: Hi-Fi audio is recorded. OFF: Hi-Fi audio is not recorded.
DOLBY NR	ON OFF	Sets Dolby NR ON or OFF. ON: Dolby NR is turned ON. OFF: Dolby NR is turned OFF.
STEREO/MONO	STEREO MONO	Selects the input sound mode from AUDIO CH1/CH2 input connectors in jack section. STEREO: Stereo sound is selected. MONO: Monaural sound is selected.

Example of display on EVF or at LINE OUT connector of VTR



```
      - AUDIO -

 01 FRONT MIC            -50dB
 02 REAR MIC CH1         -50dB
 03 REAR MIC CH2         -50dB
 04 LINE CH1/CH2           0dB
→05 PHANTOM CH1            OFF
 06 PHANTOM CH2            OFF
 07 HI-Fi REC               ON
 08 DOLBY NR               OFF
 09 STEREO/MONO         STEREO
 ** PREVIOUS MENU
 - - - - END OF DATA - - - -
```

Menu Item Setting (Continued)

BATTERY Menu

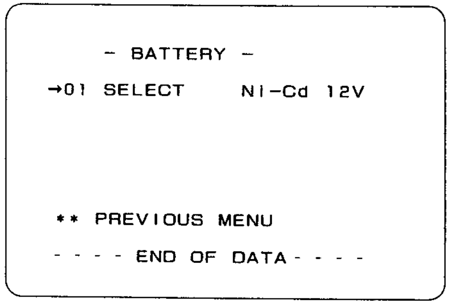
Ni-Cd 12 V is the mode set as the default.

Viewfinder sub menu item	Mode set	Functions	Battery name (product name) (see Notes)
SELECT	Ni-Cd 12 V	Selected when AC adapter or Ni-Cd battery (12 V) is used.	AU-BP402 AU-BP220 NP-1, BP-90
	Ni-Cd 13.2 V	Selected when Ni-Cd battery (13.2 V) is used.	Magnum 13
	Ni-Cd 14.4 V	Selected when Ni-Cd battery (14.4 V) is used.	Magnum 14
	DIGITAL	Selected when digital nickel-cadmium battery (13.2 V or 14.4 V) is used.	Magnum 13 digital Magnum 14 digital

NOTE

- The AU-BP402 and AU-BP220 batteries are made by Matsushita Electric Industrial Co., Ltd.
- The NP-1 and BP-90 batteries are made by Sony Corp.
- The Magnum series of batteries is made by Anton Bauer.

Example of display on EVF or at LINE OUT connector of VTR



```
      - BATTERY -
→01 SELECT      NI-Cd 12V



 ** PREVIOUS MENU
 - - - - END OF DATA - - - -
```

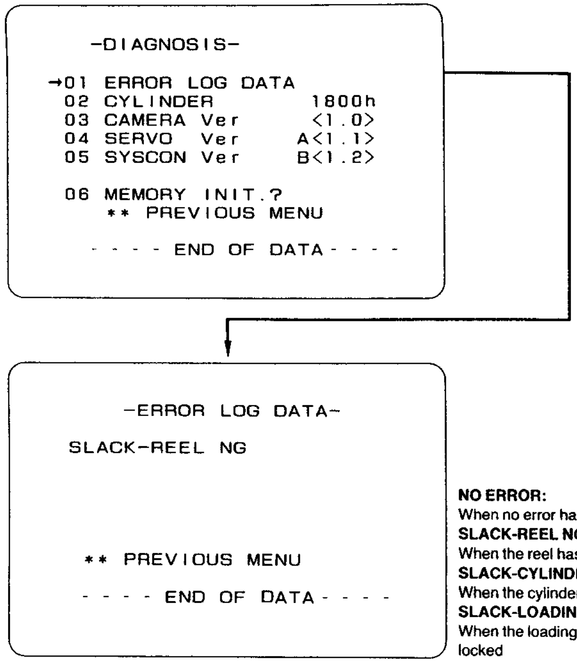
DIAGNOSIS Menu

Viewfinder sub menu item	Mode set	Functions
ERROR LOG DATA		Displays the last VTR error which occurred.
CYLINDER	000–9900h	Displays number of hours during which cylinder has rotated.
CAMERA Ver		Displays version of camera microcomputer. Example: Ver A <1.1>
SERVO Ver		Displays version of servo microcomputer. (Example: Same as that for camera microcomputer)
SYSCON Ver		Displays version of syscon microcomputer. (Example: Same as that for camera microcomputer)
MEMORY INIT.?		Memory initialization after back-up battery has been replaced. This operation must be performed after the back-up battery has been replaced.

Menu Item Setting (Continued)

DIAGNOSIS Menu (Continued)

Operation method and example of display on EVF or at LINE OUT connector of VTR



```
        -DIAGNOSIS-

 →01 ERROR LOG DATA
  02 CYLINDER          1800h
  03 CAMERA Ver        <1.0>
  04 SERVO  Ver       A<1.1>
  05 SYSCON Ver       B<1.2>

  06 MEMORY INIT.?
     ** PREVIOUS MENU

     - - - - END OF DATA - - - -
```

```
        -ERROR LOG DATA-

  SLACK-REEL NG




     ** PREVIOUS MENU

  - - - - END OF DATA - - - -
```

NO ERROR:
When no error has occurred
SLACK-REEL NG:
When the reel has locked
SLACK-CYLINDER NG:
When the cylinder has locked
SLACK-LOADING NG:
When the loading motor has locked

The ERROR LOG DATA details can be checked on the sub-sub screen.

Operation method:

1. **To display the sub-sub screen:**
Use the SHIFT button to align the arrow with "01 ERROR LOG DATA," and press the START button.

2. **To return to the sub screen display:**
Use the SHIFT button to align the arrow with "**PREVIOUS MENU," and press the START button.

To initialize the memory after the back-up battery has been replaced

1. **Press the SHIFT button to align the arrow with "06 MEMORY INIT.?"**

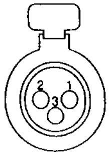
2. **Press the START button.**
When initialization is completed, "06 INITIALIZED" appears.

NOTE

The memory will not be initialized properly if the menu is exited or operation is returned to the MAIN MENU befor "06 INITIALIZED" has appeared.

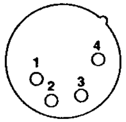
Connector Signals

Audio input connector (XLR-3P)



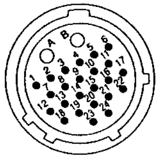
Pin No.	Signal
1	GND
2	HOT
3	COLD

External DC input connector (XLR-4P)



Pin No.	Signal
1	GND
2, 3	
4	+12 V

26P VTR connector



Pin No.	Signal
1	COMPOSITE VIDEO
2	COMPOSITE VIDEO GND
9	CAMERA MIC (H)
10	CAMERA MIC (C)
11	CAMERA MIC GND
12	VTR START/STOP
15	REC TALLY/WARNING
16	5P DATA
21	5P CLOCK
23	CTL PULSE
24	5P +5 V
A	+12 V
B	GND

Handling the Phantom Mic

This camera recorder is designed to enable a phantom mic to be used as the unit's microphone (CH1/CH2). It can be selected on menu item 3 "AUDIO" in the viewfinder. For further details, refer to "How to set the menu items" (page 63).
[The phantom power supply is set to +48 V. Before shipment from the manufacturing plant, the camera recorder was set for using the regular microphone (phantom power OFF).]

SECTION 2

DISASSEMBLY PROCEDURES

CONTENTS

2-1. DISASSEMBLY FLOW CHART ······ 2-2

2-2. DETAILED DISASSEMBLY METHOD ······ 2-3

〔CAMERA／VTR〕

2-2-1. Removal of the Right Panel ······ 2-3
2-2-2. Open of the Process C.B.A. ······ 2-3
2-2-3. Removal of the Video C.B.A. ······ 2-3
2-2-4. Removal of the Audio／System Control C.B.A. ······ 2-3
2-2-5. Removel of the Process C.B.A. ······ 2-4
2-2-6. Removal of the Power／Drive C.B.A. ······ 2-4
2-2-7. Removal of the Mechanism Interface C.B.A. ······ 2-4
2-2-8. Removal of the Left Panel ······ 2-4
2-2-9. Removal of the Power／AV Jack Unit ······ 2-4
2-2-10. Removal of the Rear Jack Unit ······ 2-5
2-2-11. Removal of the Camera Out Unit ······ 2-5
2-2-12. Removal of the LCD, Super Iris, Monitor VR C.B.A. ······ 2-6
2-2-13. Removal of the Toggle SW Unit ······ 2-6
2-2-14. Removal of the Power SW, Mode Check Unit ······ 2-6
2-2-15. Removal of the Handle ······ 2-6
2-2-16. Removal of the Operation Unit ······ 2-6
2-2-17. Removal of the Front Panel Unit ······ 2-6
2-2-18. Removal of the Cassette Compartment ······ 2-7

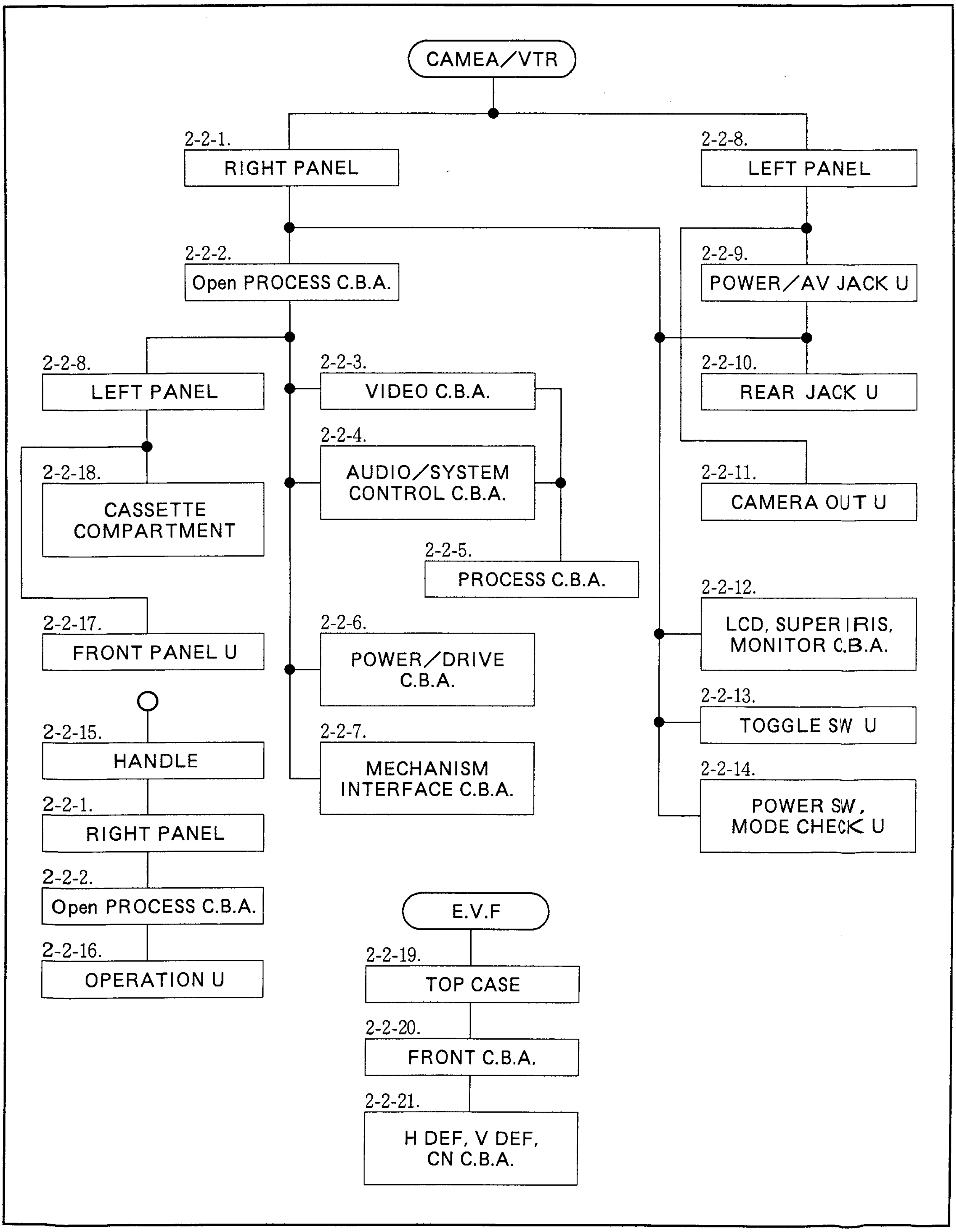
〔EVF〕

2-2-19. Removal of the Top Case ······ 2-8
2-2-20. Removal of the Front C.B.A. ······ 2-8
2-2-21. Removal of the H DEF, V DEF, CN C.B.A. ······ 2-8

2-3. SCREWS ······ 2-9

2-4. DIMENSIONS ······ 2-10

2-1. DISASSEMBLY FLOWCHART


CAMEA/VTR
2-2-1.
RIGHT PANEL
2-2-8.
LEFT PANEL
2-2-2.
Open PROCESS C.B.A.
2-2-9.
POWER/AV JACK U
2-2-8.
LEFT PANEL
2-2-3.
VIDEO C.B.A.
2-2-10.
REAR JACK U
2-2-4.
AUDIO/SYSTEM CONTROL C.B.A.
2-2-18.
CASSETTE COMPARTMENT
2-2-11.
CAMERA OUT U
2-2-5.
PROCESS C.B.A.
2-2-12.
LCD, SUPER IRIS, MONITOR C.B.A.
2-2-17.
FRONT PANEL U
2-2-6.
POWER/DRIVE C.B.A.
2-2-13.
TOGGLE SW U
2-2-15.
HANDLE
2-2-7.
MECHANISM INTERFACE C.B.A.
2-2-14.
POWER SW, MODE CHECK U
2-2-1.
RIGHT PANEL
2-2-2.
Open PROCESS C.B.A.
E.V.F
2-2-16.
OPERATION U
2-2-19.
TOP CASE
2-2-20.
FRONT C.B.A.
2-2-21.
H DEF, V DEF, CN C.B.A.

2-2. DETAIL DISASSEMBLY METHOD

<CAMERA/VTR UNIT>

2-2-1. Removal of the Right Panel

1. Unscrew the 7 screws (A). (Figure D2)
2. Carefully open the Right Panel (with taking care for connection to the Rear Jack C.B.A.).
3. Disconnect the connector P12 on the Rear Jack C.B.A..

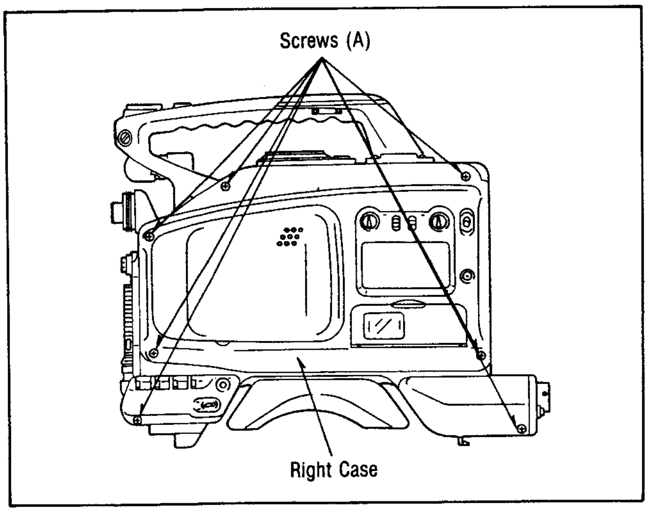

Screws (A)
Right Case

Figure D2

2-2-2. Open the Process C.B.A.

1. Unscrew the 5 screws (B) and remove the C.B.A. Plate. (Figure D3)
2. Carefully open the C.B.A. unit.

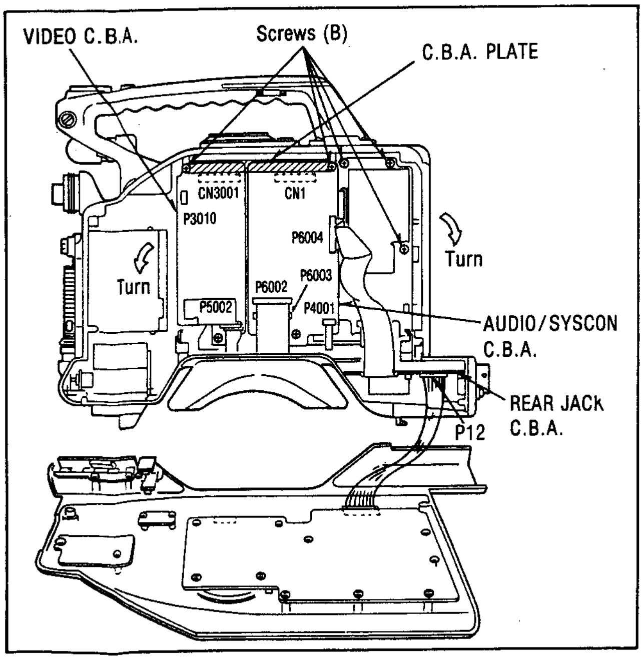

VIDEO C.B.A.
Screws (B)
C.B.A. PLATE
CN3001
P3010
CN1
P6004
Turn
Turn
P6003
P6002
P5002
P4001
AUDIO/SYSCON C.B.A.
REAR JACK C.B.A.
P12

Figure D3

2-2-3. Removal of the Video C.B.A.

1. Disconnect the connector P3010 (from AV OUT) and the flexible cable P5002 (from CYL Motor) on the Video C.B.A. (Figure D4)
2. Unscrew the screw (C-1) and the screw (C-2).
3. Disconnect the connector CN3001 and remove the Video C.B.A. from the Process C.B.A.

2-2-4. Removal of the Audio/System Control C.B.A.

1. Disconnect the 4 flexible cables P6004 (form Rear Jack), P6002, P6003 (from Mecha I/F) and P4001 (from A/C Head) on the Audio/System Control C.B.A. (Figure D4)
2. Unscrew the screw (D).
3. Disconnect the connector CN6001 and remove the Audio/System Control C.B.A. from the Process C.B.A.

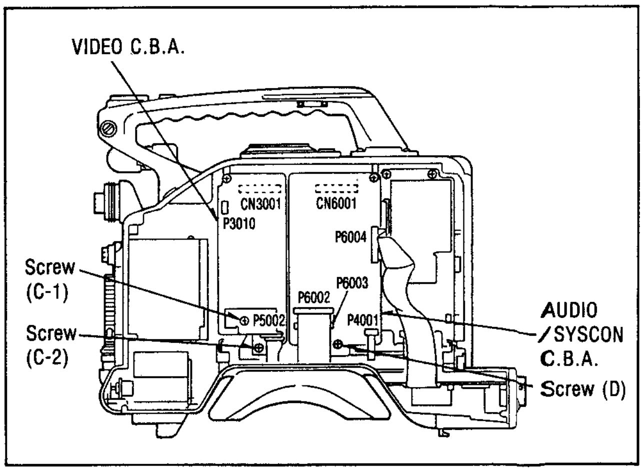

VIDEO C.B.A.
CN3001
P3010
CN6001
P6004
Screw (C-1)
P6003
P6002
P5002
P4001
Screw (C-2)
AUDIO /SYSCON C.B.A.
Screw (D)

Figure D4

2-2-5. Removal of the Process C.B.A.

1. Disconnect the 4 connectors P3003 (from CCD), P3005 (from Lens), P3006 (from Camera Out), P3007 (from Genlock) and flexible cable P3004 (from CCD Pulse) on the component side of the Process C.B.A. (Figure D5)
2. Disconnect the 2 flexible cables P3001, P3002 (from Power) on the foil side of the Process C.B.A.
3. Unscrew the 2 screws (E). (Figure D5)

2-2-6. Removal of the Power/Drive C.B.A.

1. Disconnect the connector P1003 (from Rear Jack) and the 2 flexible cables P2001, P2002 (from Mecha I/F) on the Power C.B.A. (Figure D5)
2. Unscrew the 2 screws (F). (Figure D5)

2-2-7. Removal of the Mechanism Interface C.B.A.

1. Disconnect the 12 connectors P9002 (from CC Filter), P9001 (from EVF), P9020 (from Operate), P9021 (from Safety Tab), P9019 (from Mecha Mode), P9018 (from Anton Battery), P9017 (from T Photo), P9004 (from AWB SW), P9006 (from S Photo), P9008 (from LI Battery), P9007 (from FE Head) and P9005 (from Loading Motor). (Figure D5)
2. Disconnect the 2 flexible cables P9015 (from CYL Motor), P9016 (from CAP Motor).
3. Unscrew the 4 screws (G). (Figure D5)

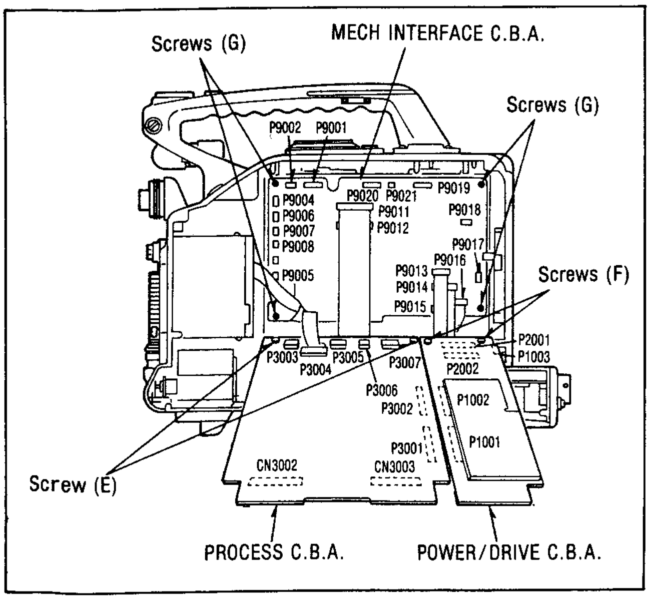

Screws (G)
MECH INTERFACE C.B.A.
Screws (G)
P9002
P9001
P9004
P9006
P9007
P9008
P9005
P9020
P9021
P9019
P9011
P9012
P9018
P9017
P9016
P9013
P9014
P9015
Screws (F)
P2001
P1003
P3003
P3004
P3005
P3007
P2002
P3006
P3002
P1002
P3001
P1001
CN3002
CN3003
Screw (E)
PROCESS C.B.A.
POWER/DRIVE C.B.A.

Figure D5

2-2-8. Removal of the Left Panel.

1. Unscrew the 2 screws (H-1) and remove the Cassette Cover. (Figure D6)
2. Loose the 4 screws (H-2).

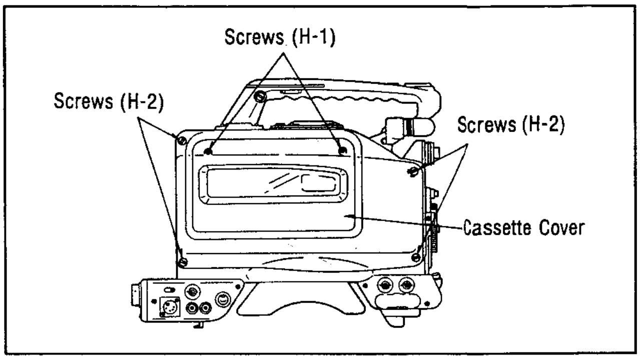

Screws (H-1)
Screws (H-2)
Screws (H-2)
Cassette Cover

Figure D6

2-2-9. Removal of the Power/AV Jack Unit.

1. Unscrew the 3 screws (I). (Figure D7)
2. Carefully pull the Power/AV Jack Unit out from the unit.(with taking care of connection to other C.B.A.s.)
3. Disconnect the 6 connectors P9700 (from Video) on the AV Out C.B.A. and P18, P13, P14, P15, P17 (from AV Out) on the Rear Jack C.B.A. (Figure D8)

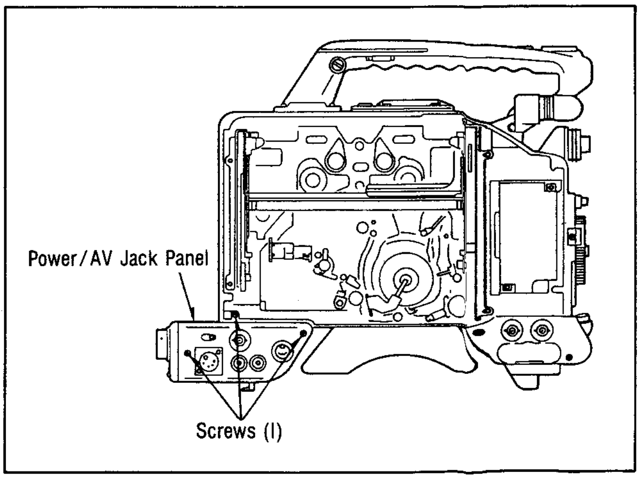

Power/AV Jack Panel
Screws (I)

Figure D7

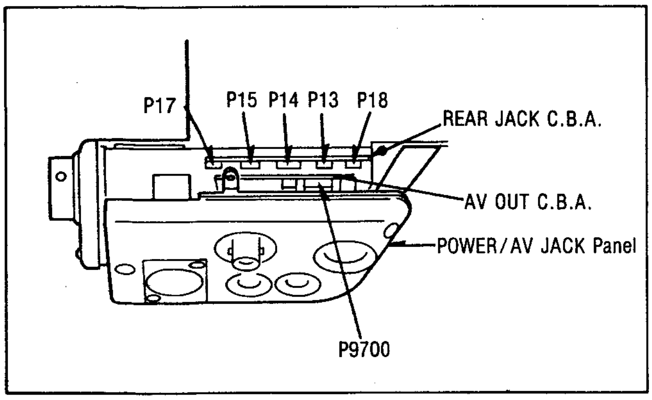

P17
P15
P14
P13
P18
REAR JACK C.B.A.
AV OUT C.B.A.
POWER/AV JACK Panel
P9700

Figure D8

2-2-10. Removal of the Rear Jack Unit.

1. Unscrew the 4 screws (J). (Figure D9)
2. Disconnect the connectors P20 (from Power) and the flexible cable P10 (from Syscon) on the right side of Rear Jack C.B.A. (Figure D10)
3. Carefully Pull the Rear Jack Unit out from the unit.

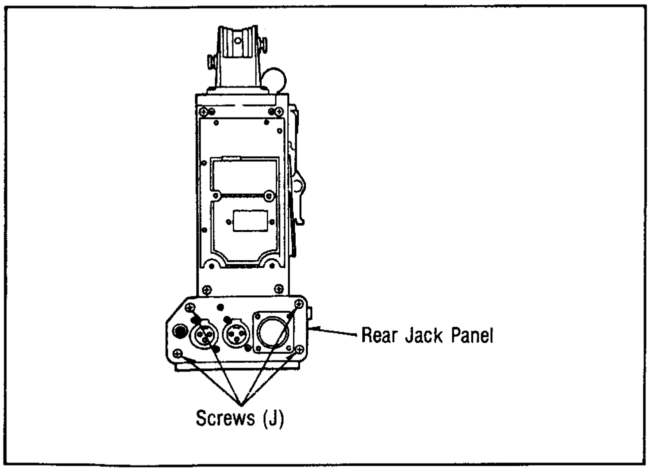

Rear Jack Panel
Screws (J)

Figure D9

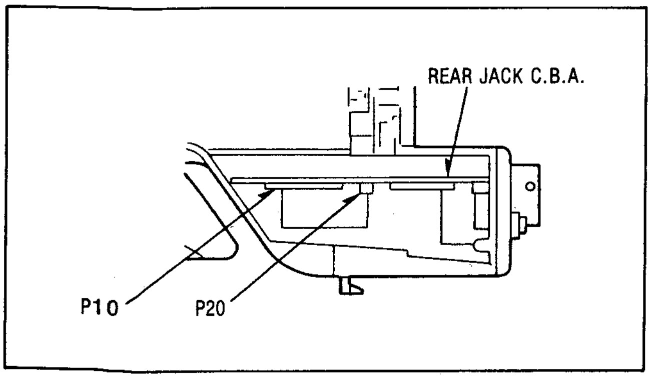

REAR JACK C.B.A.
P10
P20

Figure D10

2-2-11. Removal of the Camera Out Unit

1. Unscrew the 2 screws (K). (Figure D11)
2. Carefully pull the Camera Out Unit and disconnect the 2 connectors P9600 (from Process) on the Camera Out C.B.A. and P9500 (from Process) on the Gen Lock C.B.A.

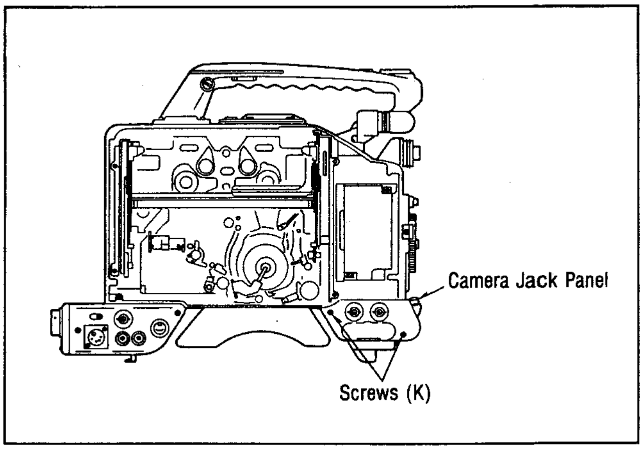

Camera Jack Panel
Screws (K)

Figure D11

2-2-12. Removal of the LCD, Super Iris & Monitor VR C.B.A.s.

1. Pull off the 2 Audio Level VR knobs on the front side of the Right Panel.
2. Unscrew the 11 screws (L-1) on the LCD C.B.A., the 2 screws (L-2) on the Super Iris C.B.A. and the 2 screws (L-3) on the Monitor C.B.A. (Figure D12)

2-2-13. Removal of the Toggle SW Unit

1. Disconnect the connector P9300 on the Toggle SW C.B.A. (Figure D12)
2. Unscrew the 2 screws (M) and remove the Toggle SW Unit.

2-2-14. Removal of the Power SW & Mode Check Unit

1. Disconnect the 2 connectors P9400 on the Power SW C.B.A. and P9401 on the Mode Check C.B.A. (Figure D12)
2. Unscrew the screw (N) and remove the Power SW Unit.

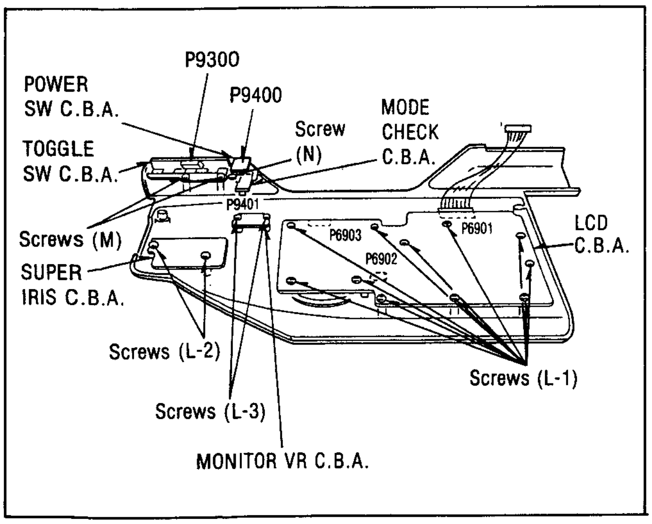

P9300
POWER SW C.B.A.
P9400
TOGGLE SW C.B.A.
Screw (N)
MODE CHECK C.B.A.
P9401
Screws (M)
P6903
P6901
P6902
LCD C.B.A.
SUPER IRIS C.B.A.
Screws (L-2)
Screws (L-1)
Screws (L-3)
MONITOR VR C.B.A.

Figure D12

2-2-15. Removal of the Handle

1. Unscrew the 2 screws (O-1) and the 4 screws (O-2). (Figure D13)
2. Carefully left up the Handle and disconnect the 2 connectors of the MIC and Back Tally Lamp.

2-2-16. Removal of the Operation Unit

1. Unscrew the 4 screws (P). (Figure D13)
2. Carefully left up the Operation Unit and disconnect the connector P501 (from Mecha I/F) and taking care connection cable of the Back Tally Lamp.

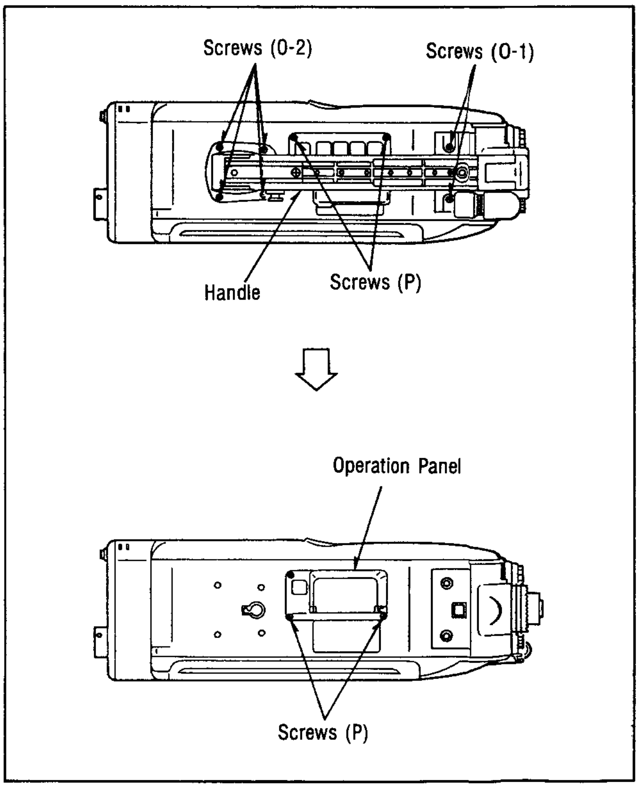

Screws (0-2)
Screws (0-1)
Handle
Screws (P)
Operation Panel
Screws (P)

Figure D13

2-2-17. Removal of the Front Panel Unit

1. Disconnect the 4 connectors P3003 (from CCD), P3005 (from Lens) on the Process C.B.A. and P9002 (from CC Filter), P9004 (from AWB SW) on the MECHA Interface C.B.A. (Figure D14)
2. Disconnect the flexible cable P1 on the CCD Pulse C.B.A. (Figure D14)
3. Unscrew the 4 screws (Q) and carefully remove the front Panel Unit from the unit. (Figure D15)

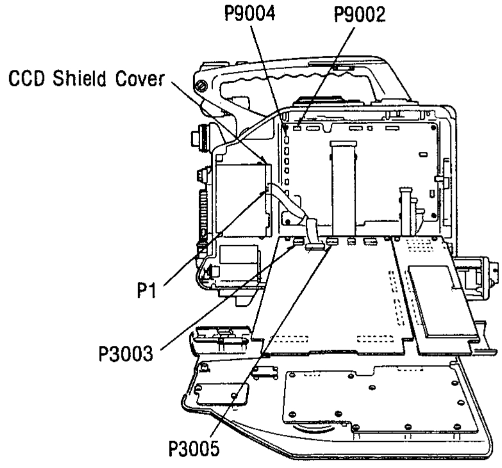

P9004
P9002
CCD Shield Cover
P1
P3003
P3005

Figure D14

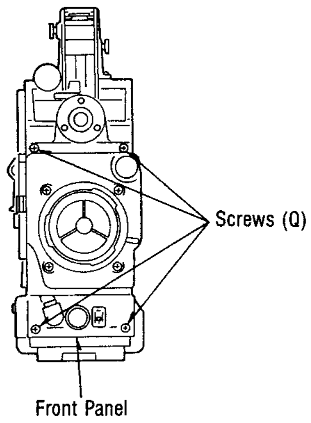

Screws (Q)
Front Panel

Figure D15

2-2-18. Removal of Cassette Compartment Unit

1. Disconnect the 2 connectors P9017 (from T Photo), P9006 (from S Photo) on the MECHA Interface C.B.A. (Figure D16)
2. Unscrew the 4 screws (R-1) on the Rear Panel. (Figure D17)
3. Unscrew the 2 screws (R-2) on the top of the Front Panel. (Figure D17)
4. Unscrew the 3 screws (S-1) on the mechanism chassis frame. (Figure D18)
5. Slide the Top Case to the right side of unit and unlock the 2 boss from the mechanism chassis. (Figure D16)
6. Unscrew the 2 screws (S-2) and the 4 screws (S-3). (Figure D18)
7. Remove the Cassette Compartment from the mechanism chassis.

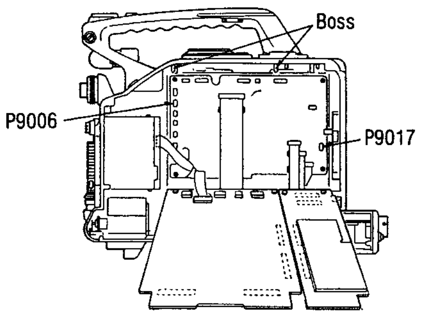

Boss
P9006
P9017

Figure D16

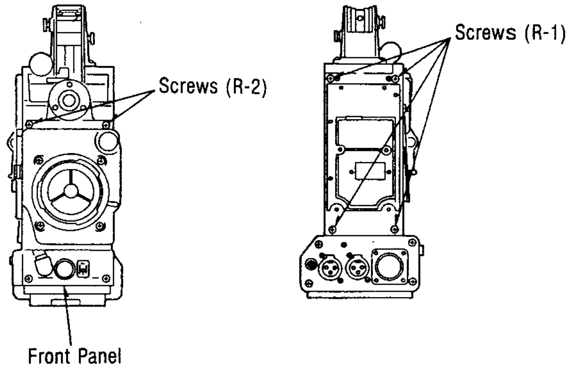

Screws (R-1)
Screws (R-2)
Front Panel

Figure D17

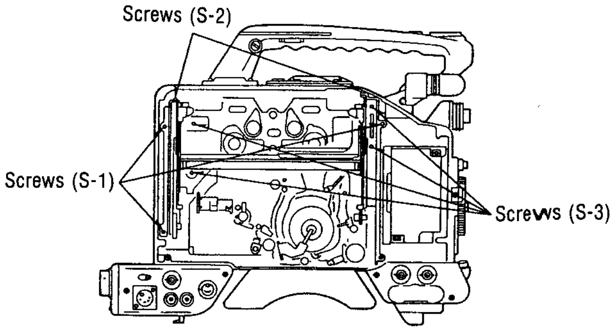

Screws (S-2)
Screws (S-1)
Screws (S-3)

Figure D18

<EVF UNIT>

2-2-19. Removal of the Top Case

1. Unscrew the screw (T-1) on the connection ring. (Figure D19)
2. Unscrew the 4 screws (T-2) on the Bottom Case.
3. Left up the Top Case.

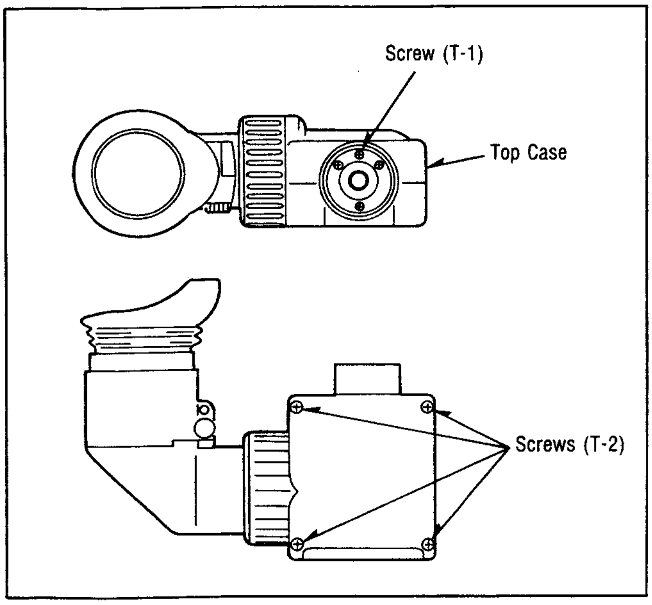

Screw (T-1)
Top Case
Screws (T-2)

Figure D19

2-2-20. Removal of the Front C.B.A.

1. Disconnect the connector P7004 on the Front C.B.A. (Figure D20)
2. Move the CRT Unit out from the Bottom Case.
3. Unscrew the 2 screws (U) and remove the C.B.A. Plate.
4. Pull the Front C.B.A. out from the Bottom Case.
5. Disconnect connector P7015 on the Front C.B.A.

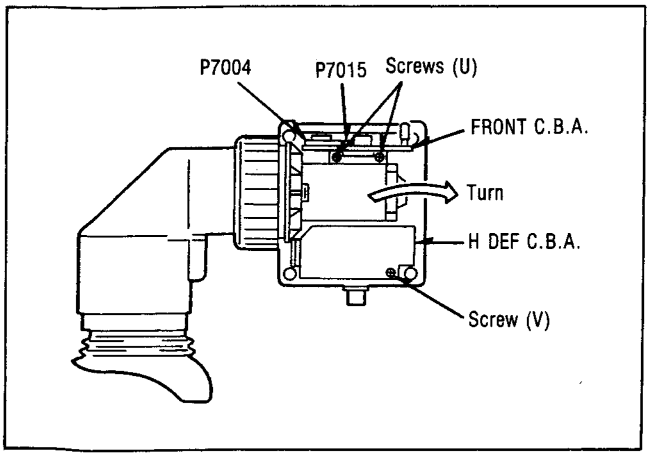

P7004
P7015
Screws (U)
FRONT C.B.A.
Turn
H DEF C.B.A.
Screw (V)

Figure D20

2-2-21. Removal of the H DEF,V DEF & CN C.B.A.

1. Unscrew the screw (V) on the H DEF C.B.A. (Figure D20)
2. Carefully lift up the left side of the H DEF C.B.A. (Figure D21)
3. Unscrew the screw (W) and the nut (X) on the V DEF C.B.A. (Figure D21)
4. Disconnect 2 connectors P7008 on the CN C.B.A. and P7002 on the V DEF C.B.A..
5. Carefully pull the C.B.A.s. out from the Bottom Case.

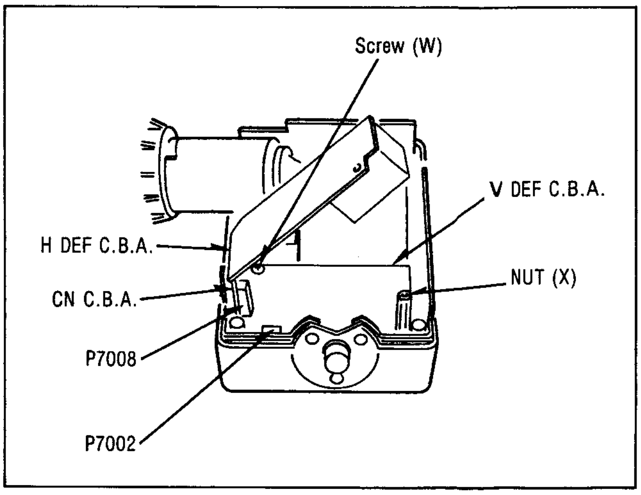
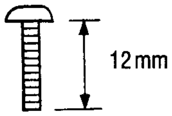
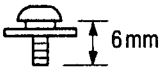
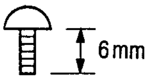
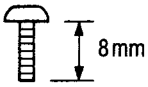
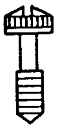
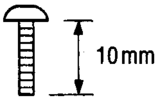
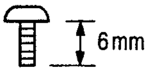
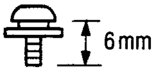
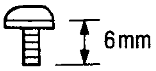
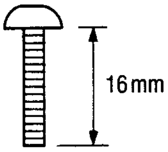
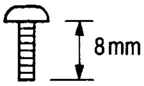
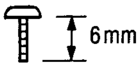
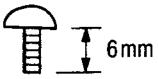
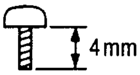
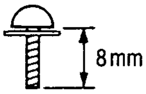
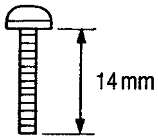
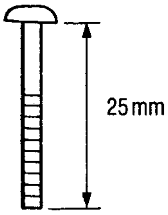
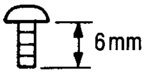
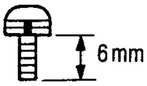

Screw (W)
V DEF C.B.A.
H DEF C.B.A.
NUT (X)
CN C.B.A.
P7008
P7002

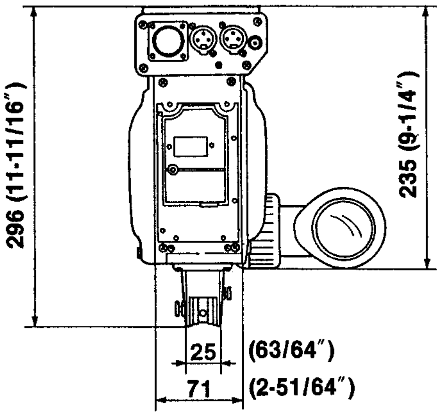
Figure D21

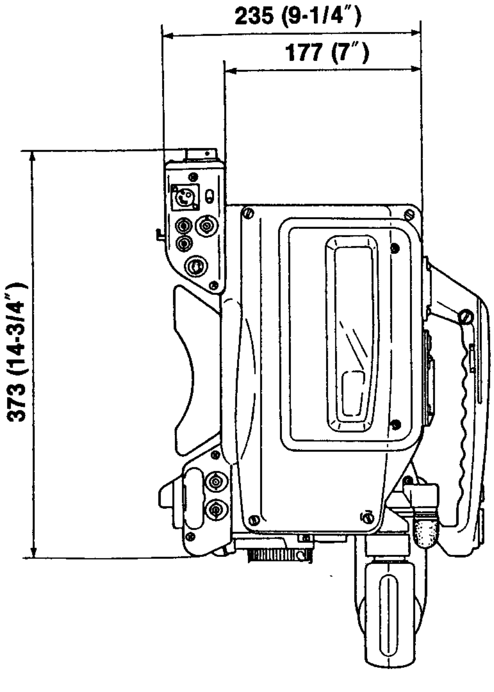
2-3. SCREWS

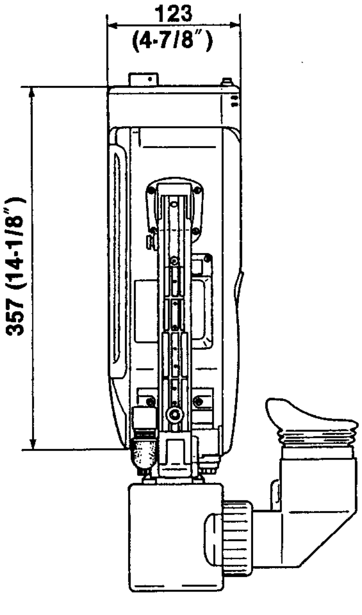
(A)  XSB3+12FZS (BLACK)	(B), (C-2), (E), (F), (G)  XYE3+EF6R (RED)	(C-1), (D)  XYC3+BF6 (RED)	(H-1)  XSB26+8FZ (BLACK)
(H-2)  VHD0820 (SILVER)	(I), (K)  XSB3+10FZS (BLACK)	(J), (Q), (R-1), (R-2)  XSB3+6FZS (BLACK)	(L-1), (L-2), (L-3)  XYN3+K6RS (RED)
(M) (N)  XYN3+C6 (RED)	(O-1)  XSB4+16FZS (BLACK)	(O-2)  XSB3+8FZS (BLACK)	(P)  XSB2+6FZ (BLACK)
(S-1)  XTN26+6F (GOLD)	(S-2)  XSN26+4 (GOLD)	(S-3)  XYE26+AF8R (RED)	(T-1)  XYN3+C14FZ (BLACK)
(T-2)  XTN3+25GFZ (BLACK)	(U)  XTN3+6G (GOLD)	(V) (W)  XYN26+K6FR (RED)	

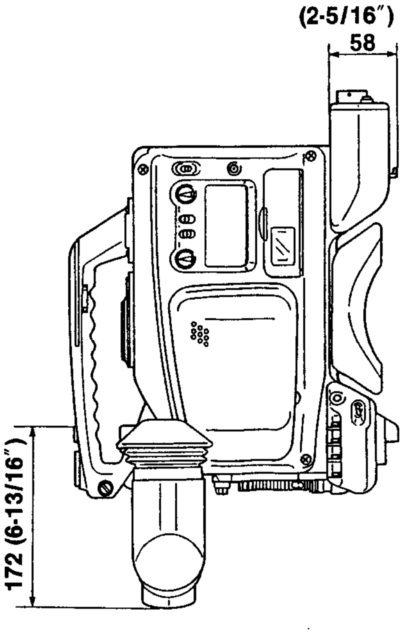
2-4. DIMENSIONS

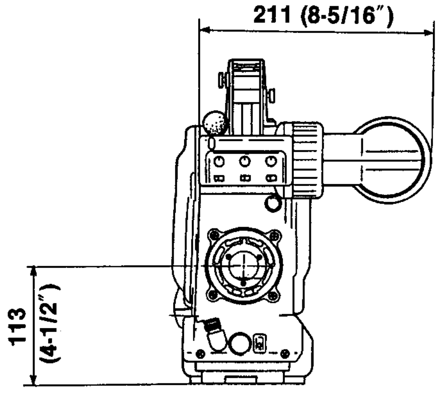
unit: mm (inch)


296 (11-11/16″)
235 (9-1/4″)
25
(63/64″)
71
(2-51/64″)


235 (9-1/4″)
177 (7″)
373 (14-3/4″)


123
(4-7/8″)
357 (14-1/8″)


(2-5/16″)
58
172 (6-13/16″)

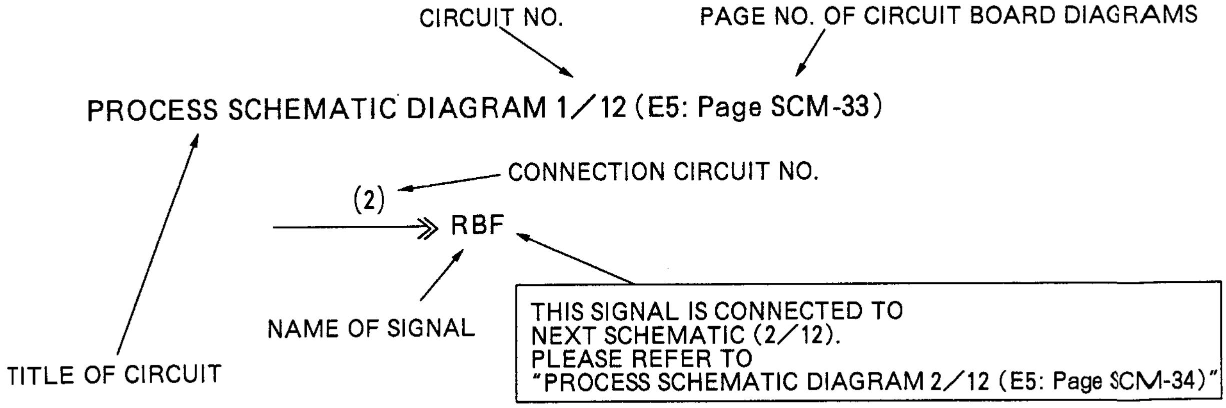

211 (8-5/16″)
113
(4-1/2″)

SECTION 3

SCHEMATIC DIAGRAMS

NOTE

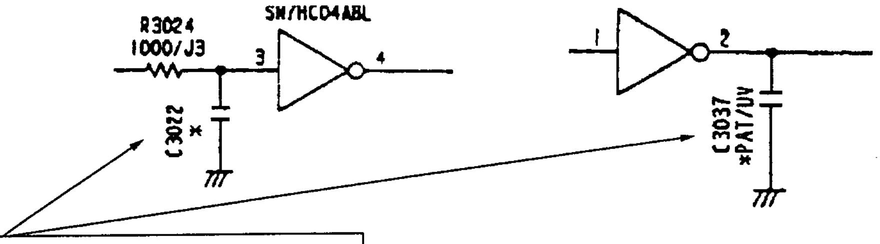
(EX1)


CIRCUIT NO.
PAGE NO. OF CIRCUIT BOARD DIAGRAMS
CONNECTION CIRCUIT NO.
(2)
RBF
NAME OF SIGNAL
TITLE OF CIRCUIT

PROCESS SCHEMATIC DIAGRAM 1/12 (E5: Page SCM-33)

THIS SIGNAL IS CONNECTED TO NEXT SCHEMATIC (2/12).
PLEASE REFER TO
"PROCESS SCHEMATIC DIAGRAM 2/12 (E5: Page SCM-34)"

(EX2)


R3024
1000/J3
SN/HC04ABL
3
4
C3022
*
1
2
C3037
*PAT/UV

∗ MARK

PLEASE REFER TO THE TABLE IN THE SCHEMATIC DIAGRAM

C3022
15pF (NTSC MODEL ONLY)

REF	NTSC	PAL
C3022	15P/UV	∗PAT/UV
C3037	∗PAT/UV	∗PAT/UV

C3037
PATTERN ONLY (NO COMPONENT)

CONTENTS

NOTE ········ SCM-1
CIRCUIT BOARD LAYOUT ········ SCM-4
OVERALL SCHEMATIC DIAGRAM 1/1 ········ SCM-5
MECHA INTERFACE SCHEMATIC DIAGRAM 1/1 (E14:Page CBA-8) ········ SCM-6
VIDEO 1 SCHEMATIC DIAGRAM 1/6 (E11:Page CBA-14) ········ SCM-7
VIDEO 2 SCHEMATIC DIAGRAM 2/6 (E11:Page CBA-14) ········ SCM-8
CHROMA SCHEMATIC CIAGRAM 3/6 (E11:Page CBA-14) ········ SCM-9
HEAD AMP SCHEMATIC DIAGRAM 4/6 (E11:Page CBA-14) ········ SCM-10
CNR SCHEMATIC DIAGRAM 5/6 (E14:Page CBA-14) ········ SCM-11
VIDEO I/F SCHEMATIC DIAGRAM 6/9 (E14:Page CBA-14) ········ SCM-12
VIDEO COMPARISON CHART (E14:Page CBA-14) ········ SCM-13
SYSCON SERVO SCHEMATIC DIAGRAM 1/8 (E13:Page CBA-13) ········ SCM-14
SUB SYSCON SCHEMATIC DIAGRAM 2/8 (E13:Page CBA-14) ········ SCM-15
TIME CODE SCHEMATIC DIAGRAM 3/8 (E13:Page CBA-13) ········ SCM-16
NORMAL AUDIO SCHEMATIC DIAGRAM 4/8 (E13:Page CBA-13) ········ SCM-17
FM AUDIO SCHEMATIC DIAGRAM 5/8 (E13:Page CBA-13) ········ SCM-18
AUDIO AGC SCHEMATIC DIAGRAM 6/8 (E13:Page CBA-13) ········ SCM-19
AUDIO SYSCON I/F 1 SCHEMATIC DIAGRAM 7/8 (E13:Page CBA-13) ········ SCM-20
AUDIO SYSCON I/F 2 SCHEMATIC DIAGRAM 8/8 (E13:Page CBA-13) ········ SCM-21
AUDIO SYSCON COMPARISON CHART (E13:Page CBA-13) ········ SCM-22
POWER SCHEMATIC DIAGRAM 1/3 (E10:Page CBA-15) ········ SCM-23
DRIVE SCHEMATIC DIAGRAM 2/3 (E10:Page CBA-15) ········ SCM-24
POWER SCHEMATIC DIAGRAM 3/3 (E10:Page CBA-15) ········ SCM-25
POWER COMPARISON CHART (E10:Page CBA-15) ········ SCM-25
REAR JACK SCHEMATIC DIAGRAM 1/2 (E6:Page CBA-9) ········ SCM-26
REAR JACK SCHEMATIC DIAGRAM 2/2 (E6:Page CBA-9) ········ SCM-27
REAR JACK COMPARISON CHART (E6:Page CBA-9) ········ SCM-27
LCD SCHEMATIC DIAGRAM 1/1 (E30:Page CBA-16) ········ SCM-28
LCD COMPARISON CHART (E30:Page CBA-16) ········ SCM-28
POWER SW SCHEMATIC DIAGRAM 1/1 (E26:Page CBA-4) ········ SCM-29
SUPER IRIS SCHEMATIC DIAGRAM 1/1 (E27:Page CBA-5) ········ SCM-30
MONITOR VR SCHEMATIC DIAGRAM 1/1 (E28:Page CBA-4) ········ SCM-31
TOGGLE SW SCHEMATIC DIAGRAM 1/1 (E29:Page CBA-5) ········ SCM-32
MODE CHECK SCHEMATIC DIAGRAM 1/1 (E25:Page CBA-4) ········ SCM-33
PROCESS SCHEMATIC DIAGRAM 1/12 (E15:Page CBA-10) ········ SCM-33
PROCESS SCHEMATIC DIAGRAM 2/12 (E15:Page CBA-10) ········ SCM-34
PROCESS SCHEMATIC DIAGRAM 3/12 (E15:Page CBA-10) ········ SCM-35
PROCESS SCHEMATIC DIAGRAM 4/12 (E15:Page CBA-10) ········ SCM-36
PROCESS SCHEMATIC DIAGRAM 5/12 (E15:Page CBA-10) ········ SCM-37
PROCESS SCHEMATIC DIAGRAM 6/12 (E15:Page CBA-10) ········ SCM-38
PROCESS SCHEMATIC DIAGRAM 7/12 (E15:Page CBA-10) ········ SCM-39
PROCESS SCHEMATIC DIAGRAM 8/12 (E15:Page CBA-10) ········ SCM-40
PROCESS SCHEMATIC DIAGRAM 9/12 (E15:Page CBA-10) ········ SCM-41
PROCESS SCHEMATIC DIAGRAM 10/12 (E15:Page CBA-10) ········ SCM-42
PROCESS SCHEMATIC DIAGRAM 11/12 (E15:Page CBA-10) ········ SCM-43
PROCESS SCHEMATIC DIAGRAM 12/12 (E15:Page CBA-10) ········ SCM-44
PROCESS COMPARISON CHART (E15:Page CBA-10) ········ SCM-45
D/S SUB SCHEMATIC DIAGRAM 1/1 (E16:Page CBA-5) ········ SCM-47
CAM BUFFER SCHEMATIC DIAGRAM 1/1 (E17:Page CBA-4) ········ SCM-48
D SUB 2 SCHEMATIC DIAGRAM 1/1 (E18:Page CBA-5) ········ SCM-48
D SUB 2 COMPARISON CHART (E18:Page CBA-5) ········ SCM-48
CCD SCHEMATIC DIAGRAM 1/1 ········ SCM-49
CCD COMPARISON CHART ········ SCM-49
H DEF SCHEMATIC DIAGRAM 1/1 (E1:Page CBA-3) ········ SCM-50
V DEF SCHEMATIC DIAGRAM 1/1 (E2:Page CBA-3) ········ SCM-51
CN SCHEMATIC DIAGRAM 1/1 (E3:Page CBA-2) ········ SCM-52
FRONT BOARD SCHEMATIC DIAGRAM (E4:Page CBA-4) ········ SCM-53
CRT MASK BOARD SCHEMATIC DIAGRAM 1/1 (E5:Page CBA-2) ········ SCM-54
OPERATE SCHEMATIC DIAGRAM 1/1 (E24:Page CBA-3) ········ SCM-54
AV OUT SCHEMATIC DIAGRAM 1/1 (E8:Page CBA-5) ········ SCM-54

GEN LOCK SCHEMATIC DIAGRAM 1/1 (E31:Page CBA-5) SCM-55
CCD PULSE SCHEMATIC DIAGRAM 1/1 (E19:Page CBA-6) SCM-57
CCD PULSE COMPARISON CHART (E19:Page CBA-6) SCM-57
CCD DRIVE SCHEMATIC DIAGRAM 1/1 (E20:Page CBA-7) SCM-58
MECHANISM CONNECTION SCHEMATIC DIAGRAM 1/1 (E37:Page CBA-16) SCM-58

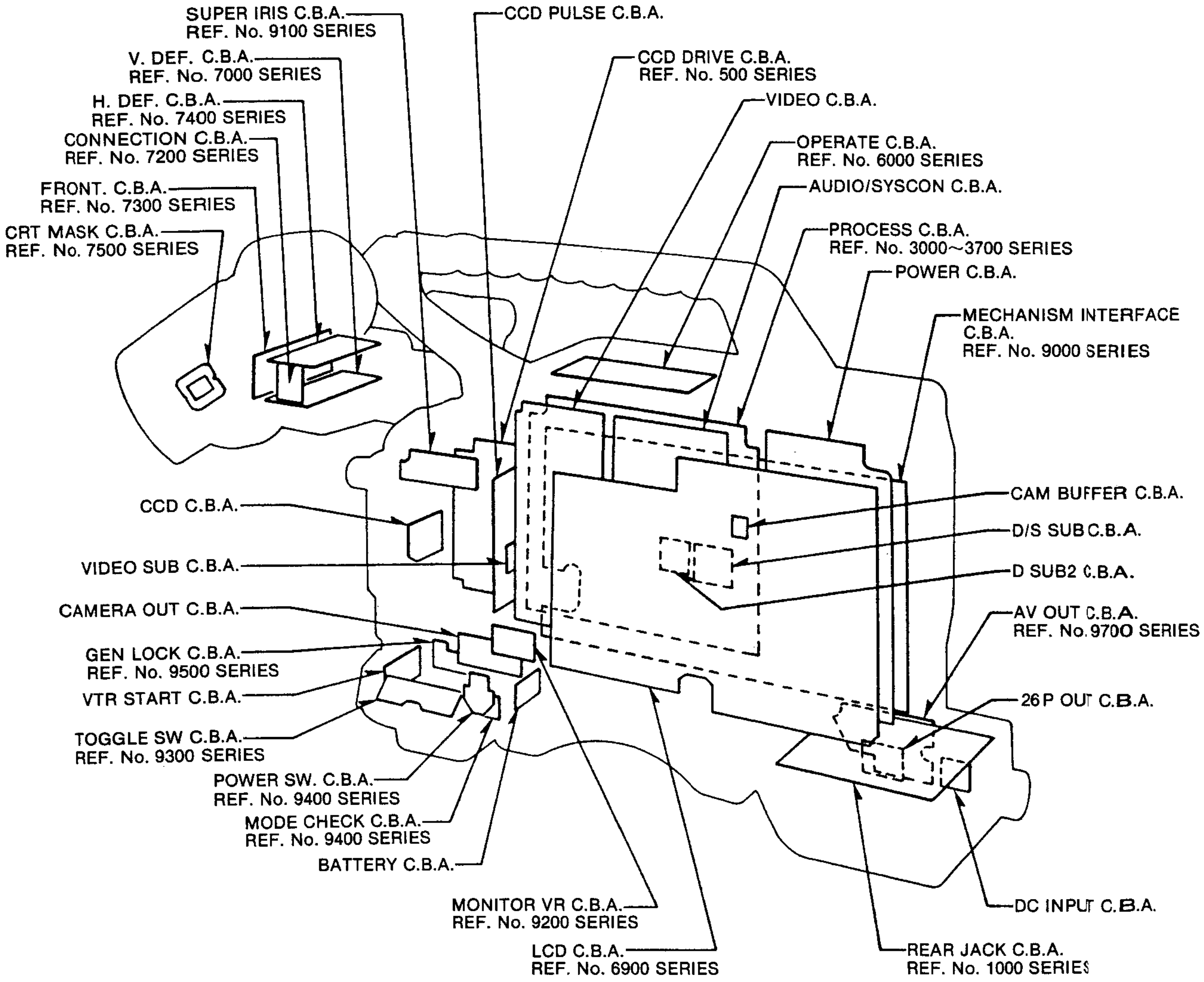
IMPORTANT SAFETY NOTICE

COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE

DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

CIRCUIT BOARD LAYOUT


SUPER IRIS C.B.A.
REF. No. 9100 SERIES
V. DEF. C.B.A.
REF. No. 7000 SERIES
H. DEF. C.B.A.
REF. No. 7400 SERIES
CONNECTION C.B.A.
REF. No. 7200 SERIES
FRONT. C.B.A.
REF. No. 7300 SERIES
CRT MASK C.B.A.
REF. No. 7500 SERIES
CCD PULSE C.B.A.
CCD DRIVE C.B.A.
REF. No. 500 SERIES
VIDEO C.B.A.
OPERATE C.B.A.
REF. No. 6000 SERIES
AUDIO/SYSCON C.B.A.
PROCESS C.B.A.
REF. No. 3000~3700 SERIES
POWER C.B.A.
MECHANISM INTERFACE C.B.A.
REF. No. 9000 SERIES
CCD C.B.A.
VIDEO SUB C.B.A.
CAMERA OUT C.B.A.
GEN LOCK C.B.A.
REF. No. 9500 SERIES
VTR START C.B.A.
TOGGLE SW C.B.A.
REF. No. 9300 SERIES
POWER SW. C.B.A.
REF. No. 9400 SERIES
MODE CHECK C.B.A.
REF. No. 9400 SERIES
BATTERY C.B.A.
MONITOR VR C.B.A.
REF. No. 9200 SERIES
LCD C.B.A.
REF. No. 6900 SERIES
CAM BUFFER C.B.A.
D/S SUB C.B.A.
D SUB2 C.B.A.
AV OUT C.B.A.
REF. No. 9700 SERIES
26P OUT C.B.A.
DC INPUT C.B.A.
REAR JACK C.B.A.
REF. No. 1000 SERIES

VIDEO C.A.B.

VIDEO 1 SECTION: REF. No. 3000/3200/8300 SERIES
VIDEO 2 SECTION: REF. No. 3000/3300 SERIES
CHROMA SECTION: REF. No. 8000/8100 SERIES
HEAD AMP SECTION: REF. No. 5000 SERIES
CNR SECTION: REF. No. 8300/8400 SERIES

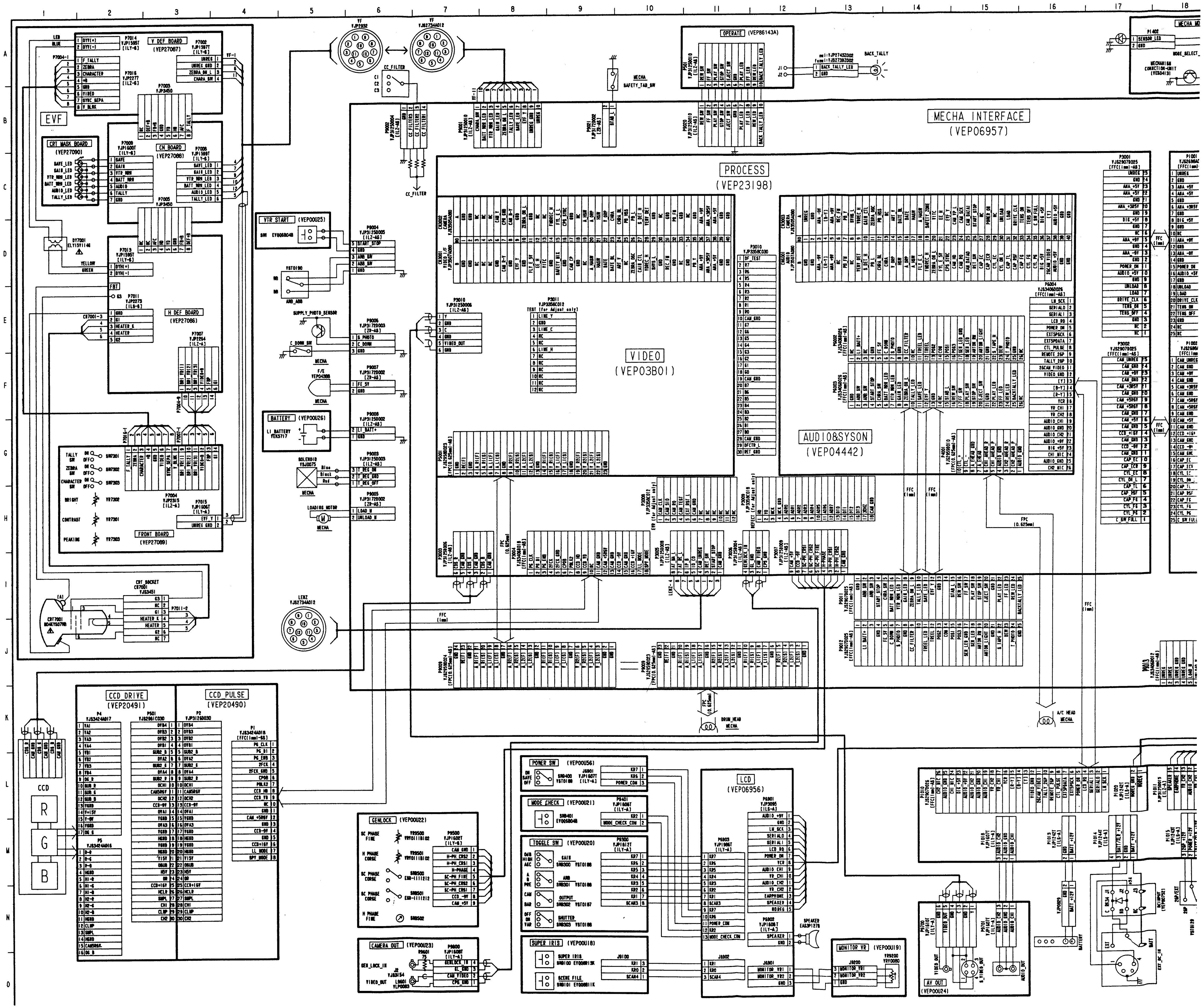
POWER C.A.B.

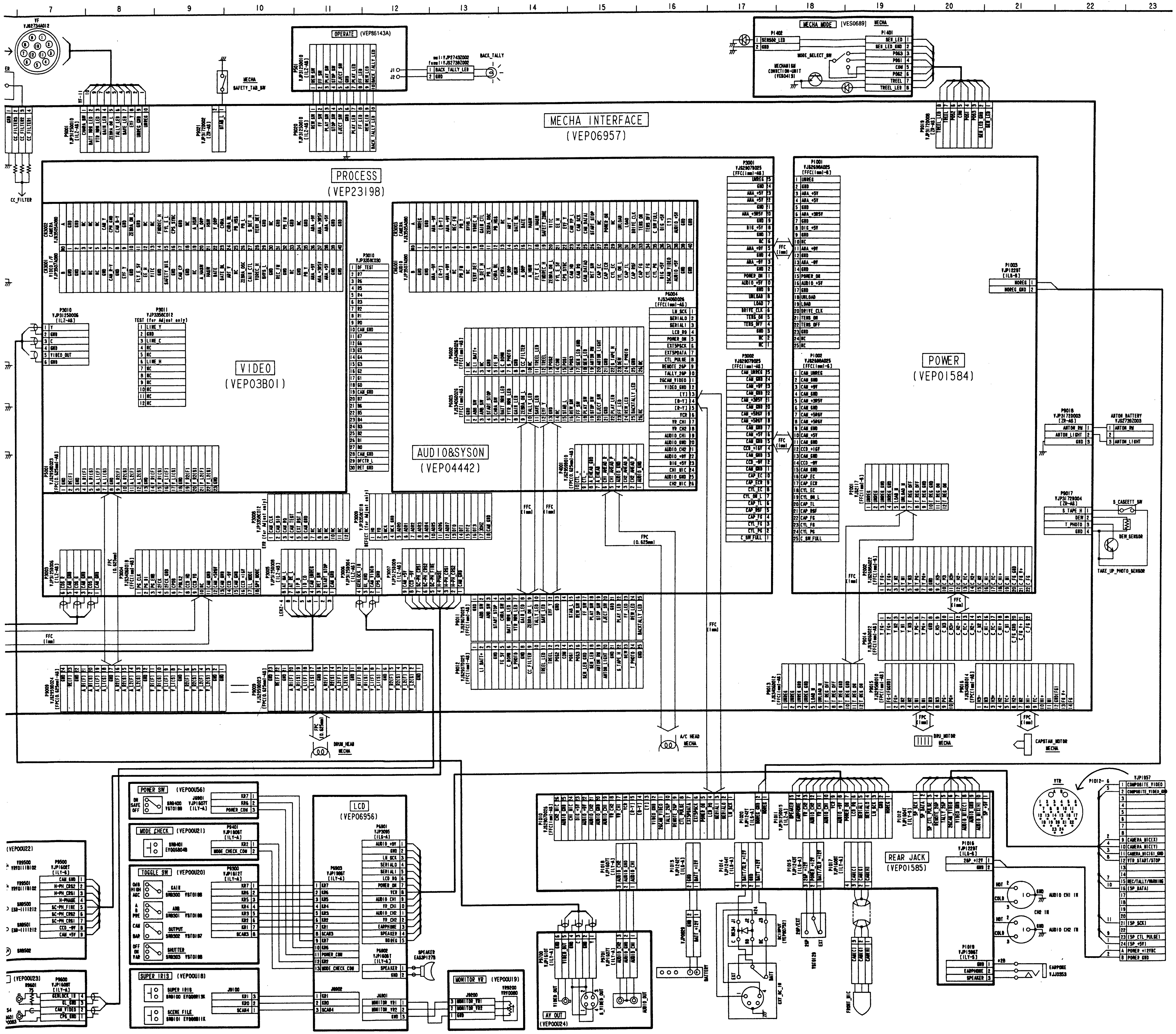
POWER SECTION: REF. No. 1000 SERIES
DRIVE SECTION: REF. No. 2000 SERIES

AUDIO / SYSCON C.A.B.

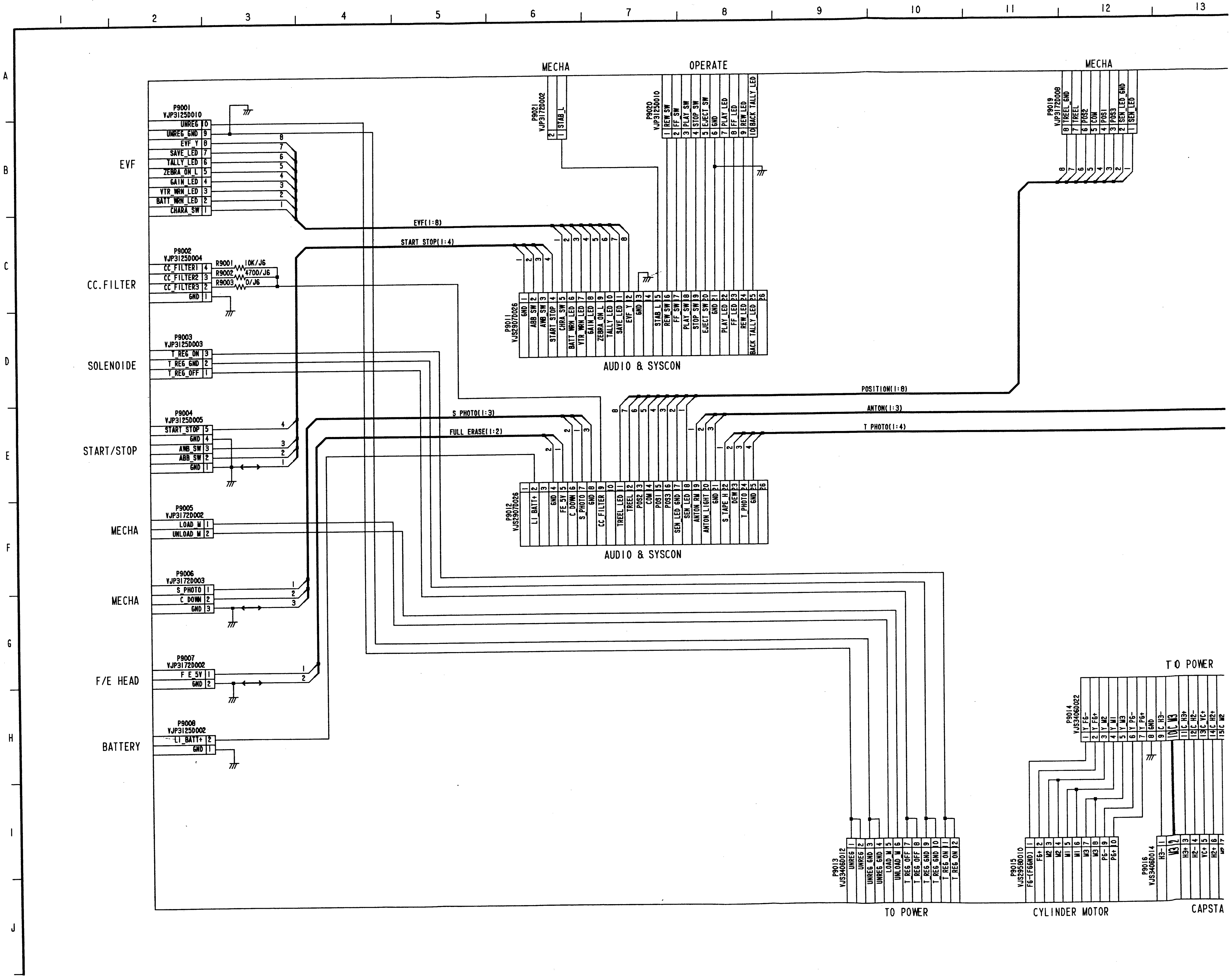
SYSCON SERVO SECTION: REF. No. 6000 SERIES
SUB SYSCON SECTION: REF. No. 6500 SERIES
TIME CODE SECTION: REF. No. 6800 SERIES
NORMAL AUDIO SECTION: REF. No. 4000/4100/4200/4500 SERIES
FM AUDIO SECTION: REF. No. 4000/4300/4400/4600 SERIES
AUDIO AGC SECTION: REF. No. 4100/4200/4500/4700 SERIES

OVERALL SCHEMATIC DIAGRAM 1／1

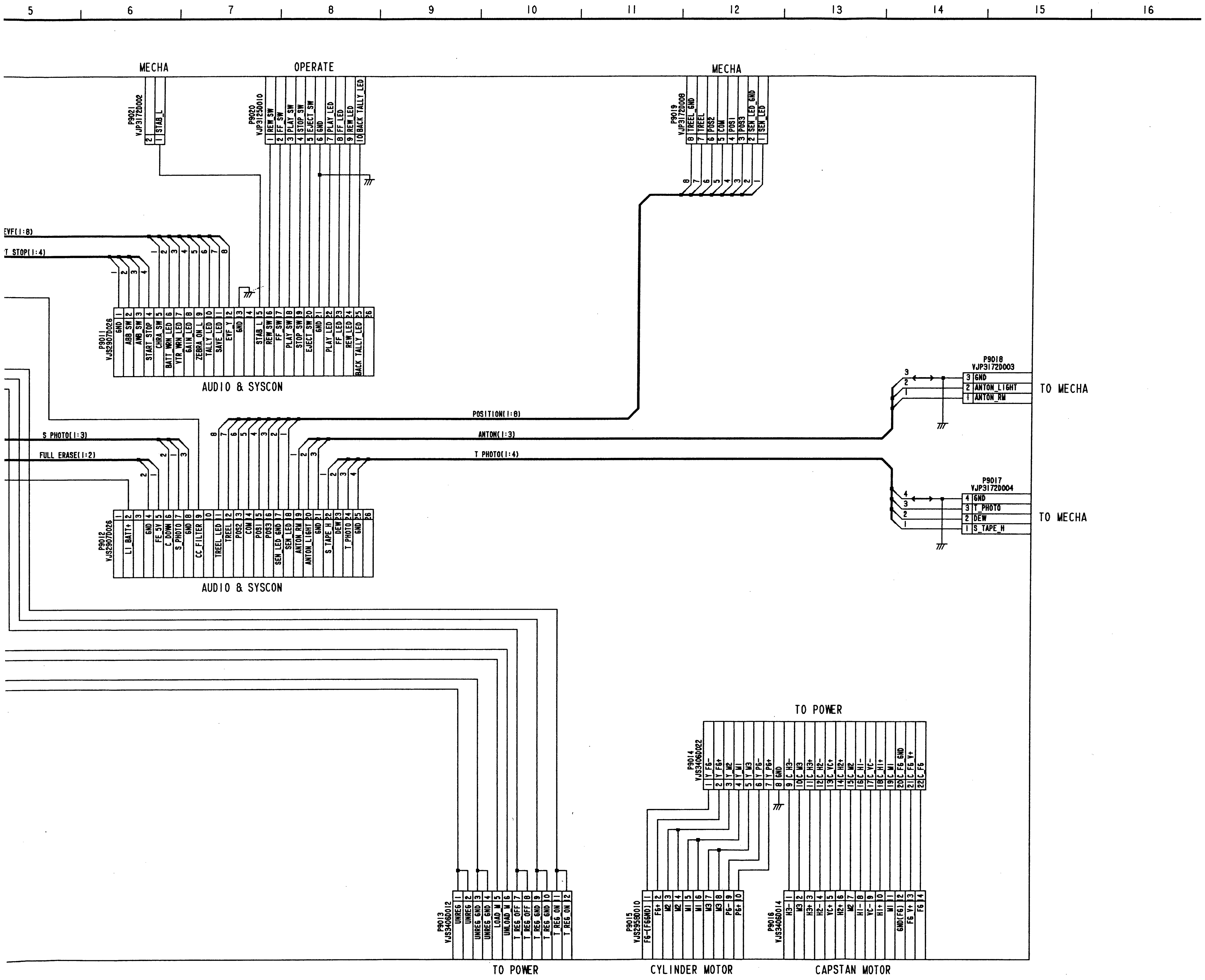

EVF
Y DEF BOARD (VEP27087)
CRT MASK BOARD (VEP27090)
CN BOARD (VEP27088)
H DEF BOARD (VEP27086)
FRONT BOARD (VEP27089)
VTR START (VEP00U25)
BATTERY (VEP00U26)
OPERATE (VEP86143A)
MECHA INTERFACE (VEP06957)
PROCESS (VEP23198)
VIDEO (VEP03B01)
AUDIO&SYSON (VEP04442)
LENZ
CCD DRIVE (VEP20491)
CCD PULSE (VEP20490)
CCD
R
G
B
GENLOCK (VEP00U22)
CAMERA OUT (VEP00U23)
POWER SW (VEP00U56)
MODE CHECK (VEP00U21)
TOGGLE SW (VEP00U20)
SUPER IRIS (VEP00U18)
LCD (VEP06956)
MONITOR VR (VEP00U19)
AV OUT (VEP00U24)
MECHA
FFC
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O


MECHA INTERFACE
(VEP06957)
MECHA MODE (VES0689)
OPERATE (VEP86143A)
PROCESS
(VEP23198)
VIDEO
(VEP03B01)
AUDIO&SYSON
(VEP04442)
POWER
(VEP01584)
REAR JACK
(VEP01585)
LCD
(VEP06956)
POWER SW (VEP00U56)
MODE CHECK (VEP00U21)
TOGGLE SW (VEP00U20)
SUPER IRIS (VEP00U18)
MONITOR VR (VEP00U19)
AV OUT
(VEP00U24)
DRUM_HEAD
MECHA
A/C HEAD
MECHA
DRU_MOTOR
MECHA
CAPSTAN_MOTOR
MECHA
TAKE_UP_PHOTO_SENSOR
DEW_SENSOR
CC_FILTER
MECHA
SAFETY_TAB_SW
BACK_TALLY
SPEAKER
EARPHONE

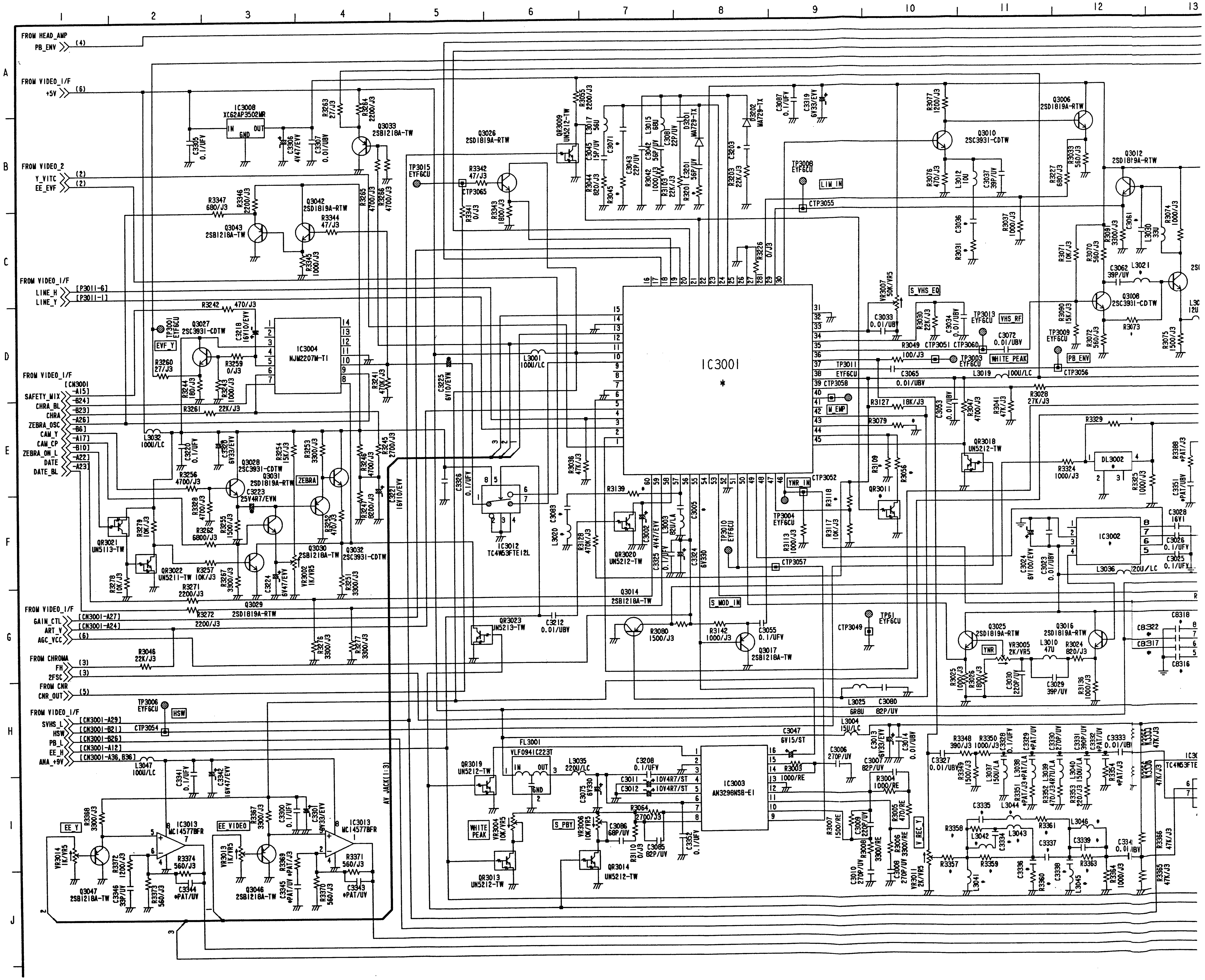
MECHA INTERFACE SCHEMATIC DIAGRAM 1／1（E14:Page CBA-8）


EVF
P9001
VJP3125D010
UNREG
UNREG_GND
EVF_Y
SAVE_LED
TALLY_LED
ZEBRA_ON_L
GAIN_LED
VTR_WRN_LED
BATT_WRN_LED
CHARA_SW
CC.FILTER
P9002
VJP3125D004
CC_FILTER1
CC_FILTER2
CC_FILTER3
GND
R9001 10K/J6
R9002 4700/J6
R9003 0/J6
SOLENOIDE
P9003
VJP3125D003
T_REG_ON
T_REG_GND
T_REG_OFF
START/STOP
P9004
VJP3125D005
START_STOP
GND
AWB_SW
ABB_SW
GND
MECHA
P9005
VJP3172D002
LOAD_M
UNLOAD_M
MECHA
P9006
VJP3172D003
S_PHOTO
C_DOWN
GND
F/E HEAD
P9007
VJP3172D002
F_E_5V
GND
BATTERY
P9008
VJP3125D002
LI_BATT+
GND
MECHA
P9021
VJP3172D002
STAB_L
OPERATE
P9020
VJP3125D010
REW_SW
FF_SW
PLAY_SW
STOP_SW
EJECT_SW
GND
PLAY_LED
FF_LED
REW_LED
BACK_TALLY_LED
MECHA
P9019
VJP3172D008
TREEL_GND
TREEL
POS2
COM
POS1
POS3
SEN_LED_GND
SEN_LED
EVF(1:8)
START_STOP(1:4)
P9011
VJS2907D026
GND
ABB_SW
AWB_SW
START_STOP
CHRA_SW
BATT_WRN_LED
VTR_WRN_LED
GAIN_LED
ZEBRA_ON_L
TALLY_LED
SAVE_LED
EVF_Y
GND
STAB_L
REW_SW
FF_SW
PLAY_SW
STOP_SW
EJECT_SW
GND
PLAY_LED
FF_LED
REW_LED
BACK_TALLY_LED
AUDIO & SYSCON
POSITION(1:8)
ANTON(1:3)
T_PHOTO(1:4)
S_PHOTO(1:3)
FULL_ERASE(1:2)
P9012
VJS2907D026
LI_BATT+
GND
FE_5V
C_DOWN
S_PHOTO
GND
CC_FILTER
TREEL_LED
TREEL
POS2
COM
POS1
POS3
SEN_LED_GND
SEN_LED
ANTON_RM
ANTON_LIGHT
GND
S_TAPE_H
DEW
T_PHOTO
GND
AUDIO & SYSCON
TO POWER
P9014
VJS3406D022
Y_F6-
Y_F6+
Y_M2
Y_M1
Y_M3
Y_P6-
Y_P6+
GND
C_H3-
C_M3
C_H3+
C_H2-
C_VC+
C_H2+
C_M2
P9013
VJS3406D012
UNREG
UNREG
UNREG_GND
UNREG_GND
LOAD_M
UNLOAD_M
T_REG_OFF
T_REG_OFF
T_REG_GND
T_REG_GND
T_REG_ON
T_REG_ON
TO POWER
P9015
VJS2958D010
F6-(F6MO)
F6+
M2
M1
M3
P6-
P6+
CYLINDER MOTOR
P9016
VJS3406D014
H3-
H3+
H2-
VC+
H2+
CAPSTA

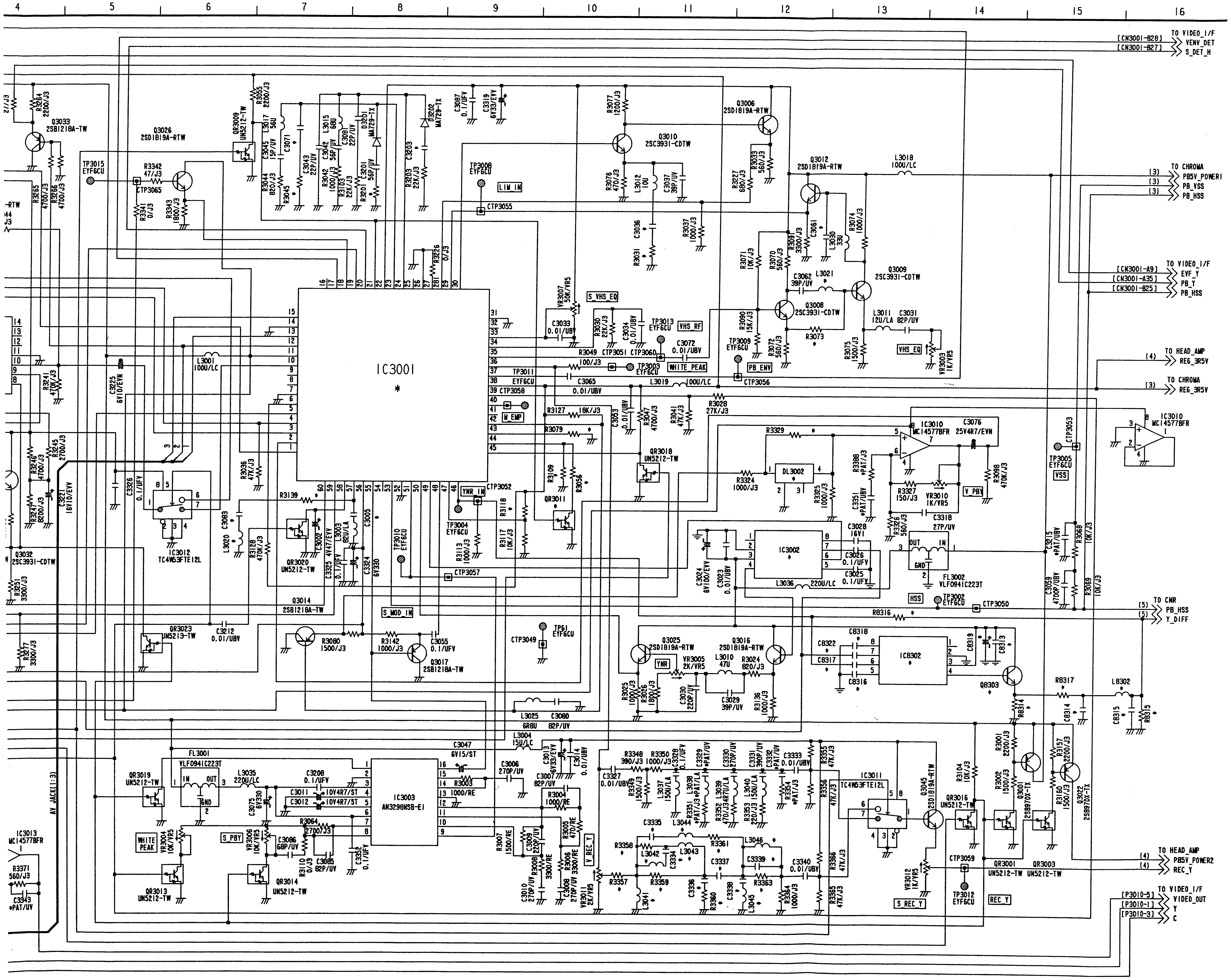
AM 1／1（E14:Page CBA-8）


5
6
7
8
9
10
11
12
13
14
15
16
MECHA
P9021
VJP3172D002
1 STAB_L
2
OPERATE
P9020
VJP3125D010
1 REW_SW
2 FF_SW
3 PLAY_SW
4 STOP_SW
5 EJECT_SW
6 GND
7 PLAY_LED
8 FF_LED
9 REW_LED
10 BACK TALLY_LED
MECHA
P9019
VJP3172D008
8 TREEL_GND
7 TREEL
6 POS2
5 COM
4 POS1
3 POS3
2 SEN_LED_GND
1 SEN_LED
EVF(1:8)
T STOP(1:4)
P9011
VJS2907D026
1 GND
2 ABB_SW
3 AWB_SW
4 START_STOP
5 CHRA_SW
6 BATT_WRN_LED
7 VTR_WRN_LED
8 GAIN_LED
9 ZEBRA_ON_L
10 TALLY_LED
11 SAVE_LED
12 EVF_Y
13 GND
14
15 STAB_L
16 REW_SW
17 FF_SW
18 PLAY_SW
19 STOP_SW
20 EJECT_SW
21 GND
22 PLAY_LED
23 FF_LED
24 REW_LED
25 BACK TALLY_LED
26
AUDIO & SYSCON
P9018
VJP3172D003
3 GND
2 ANTON_LIGHT
1 ANTON_RM
TO MECHA
POSITION(1:8)
S_PHOTO(1:3)
ANTON(1:3)
FULL_ERASE(1:2)
T_PHOTO(1:4)
P9017
VJP3172D004
4 GND
3 T_PHOTO
2 DEW
1 S_TAPE_H
TO MECHA
P9012
VJS2907D026
1
2 LI_BATT+
3
4 GND
5 FE_5V
6 C_DOWN
7 S_PHOTO
8 GND
9 CC_FILTER
10
11 TREEL_LED
12 TREEL
13 POS2
14 COM
15 POS1
16 POS3
17 SEN_LED_GND
18 SEN_LED
19 ANTON_RM
20 ANTON_LIGHT
21 GND
22 S_TAPE_H
23 DEW
24 T_PHOTO
25 GND
26
AUDIO & SYSCON
TO POWER
P9014
VJS3406D022
1 Y_FG-
2 Y_FG+
3 Y_M2
4 Y_M1
5 Y_M3
6 Y_PG-
7 Y_PG+
8 GND
9 C_H3-
10 C_M3
11 C_H3+
12 C_H2-
13 C_VC+
14 C_H2+
15 C_M2
16 C_H1-
17 C_VC-
18 C_H1+
19 C_M1
20 C_FG_GND
21 C_FG_V+
22 C_FG
P9013
VJS3406D012
1 UNREG
2 UNREG
3 UNREG_GND
4 UNREG_GND
5 LOAD_M
6 UNLOAD_M
7 T_REG_OFF
8 T_REG_OFF
9 T_REG_GND
10 T_REG_GND
11 T_REG_ON
12 T_REG_ON
TO POWER
P9015
VJS2958D010
1 FG-(FGGND)
2 FG+
3 M2
4 M2
5 M1
6 M1
7 M3
8 M3
9 PG-
10 PG+
CYLINDER MOTOR
P9016
VJS3406D014
1 H3-
2 M3
3 H3+
4 H2-
5 VC+
6 H2+
7 M2
8 H1-
9 VC-
10 H1+
11 M1
12 GND(FG)
13 FG_V+
14 FG
CAPSTAN MOTOR

VIDEO 1 SCHEMATIC DIAGRAM 1／6（E11:Page CBA-14）

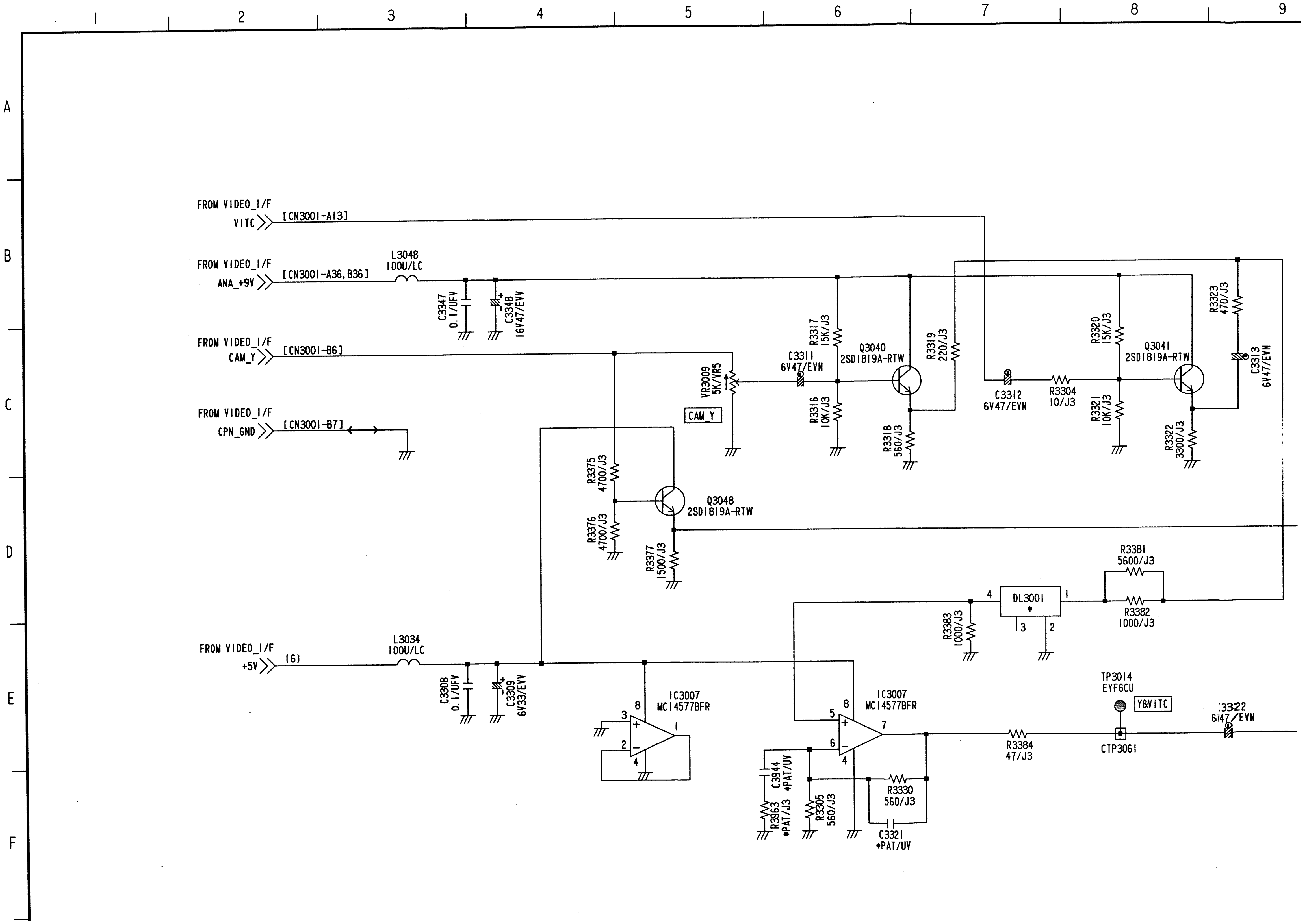


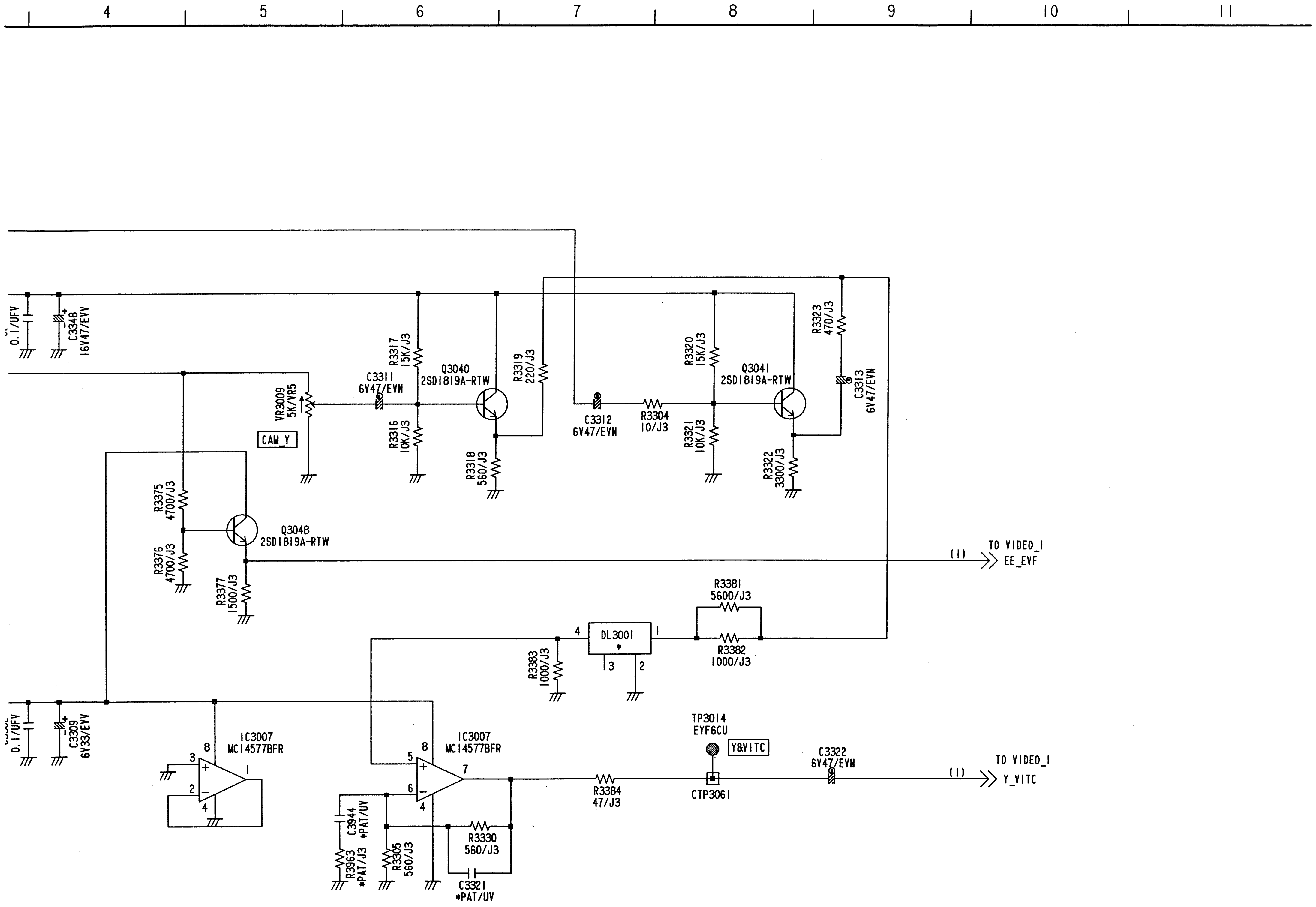
FROM HEAD_AMP
PB_ENV
FROM VIDEO_I/F
+5V
FROM VIDEO_2
Y_VITC
EE_EVF
FROM VIDEO_I/F
LINE_H
LINE_Y
[P3011-6]
[P3011-1]
FROM VIDEO_I/F
[CN3001]
SAFETY_MIX
CHRA_BL
CHRA
ZEBRA_OSC
CAM_Y
CAM_CP
ZEBRA_ON_L
DATE
DATE_BL
FROM VIDEO_I/F
GAIN_CTL
ART_Y
AGC_VCC
FROM CHROMA
FH
2FSC
FROM CNR
CNR_OUT
FROM VIDEO_I/F
SVHS_L
HSW
PB_L
EE_H
ANA_+9V
IC3008
XC62AP3502MR
IC3004
NJM2207M-TI
IC3001
IC3012
TC4W53FTE12L
IC3002
IC3003
AN3298NSB-E1
IC3013
MC14577BFR
FL3001
VLF0941C223T
DL3002
Q3033
2SB1218A-TW
Q3026
2SD1819A-RTW
QR3009
UN5212-TW
Q3042
2SD1819A-RTW
Q3043
2SB1218A-TW
Q3027
2SC3931-CDTW
Q3028
2SC3931-CDTW
Q3031
2SD1819A-RTW
Q3030
2SB1218A-TW
Q3032
2SC3931-CDTW
Q3029
2SD1819A-RTW
QR3021
UN5113-TW
QR3022
UN5211-TW
QR3023
UN5213-TW
QR3020
UN5212-TW
Q3014
2SB1218A-TW
Q3017
2SB1218A-TW
Q3006
2SD1819A-RTW
Q3010
2SC3931-CDTW
Q3012
2SD1819A-RTW
Q3008
2SC3931-CDTW
QR3018
UN5212-TW
QR3011
Q3025
2SD1819A-RTW
Q3016
2SD1819A-RTW
QR3019
UN5212-TW
QR3013
UN5212-TW
QR3014
UN5212-TW
Q3047
2SB1218A-TW
Q3046
2SB1218A-TW
EVF_Y
ZEBRA
LIM_IN
S_VHS_EQ
YHS_RF
WHITE_PEAK
PB_ENV
M_EMP
YNR_IN
S_MOD_IN
YNR
HSW
EE_Y
EE_VIDEO
WHITE PEAK
S_PBY
V_REC_Y
AV_JACK(1:3)
TP3015
TP3065
TP3006
TP3013
TP3009
TP3003
TP3011
TP3004
TP3010
TP61
CTP3055
CTP3052
CTP3057
CTP3049
CTP3054
VR3007
VR3002
VR3005
VR3004
VR3006
VR3014
VR3013
VR3011


4
5
6
7
8
9
10
11
12
13
14
15
16
IC3001
IC3002
IC3003
AN3298NSB-E1
IC3010
MC14577BFR
IC3011
TC4W53FTE12L
IC3012
TC4W53FTE12L
IC3013
MC14577BFR
IC8302
DL3002
FL3001
VLF0941C223T
FL3002
VLF0941C223T
Q3006
2SD1819A-RTW
Q3010
2SC3931-CDTW
Q3012
2SD1819A-RTW
Q3009
2SC3931-CDTW
Q3008
2SC3931-CDTW
Q3026
2SD1819A-RTW
Q3033
2SB1218A-TW
Q3032
2SC3931-CDTW
Q3014
2SB1218A-TW
Q3017
2SB1218A-TW
Q3025
2SD1819A-RTW
Q3016
2SD1819A-RTW
Q3045
2SD1819A-RTW
Q3001
2SB970X-TX
Q3022
2SB970X-TX
Q8303
QR3009
UN5212-TW
QR3018
UN5212-TW
QR3011
QR3020
UN5212-TW
QR3023
UN5213-TW
QR3019
UN5212-TW
QR3013
UN5212-TW
QR3014
UN5212-TW
QR3016
UN5212-TW
QR3001
UN5212-TW
QR3003
UN5212-TW
LIM_IN
S_VHS_EQ
VHS_RF
WHITE_PEAK
PB_ENV
VHS_EQ
M_EMP
YNR_IN
S_MOD_IN
HSS
VSS
V_PBY
YNR
WHITE PEAK
S_PBY
V_REC_Y
S_REC_Y
REC_Y
TO VIDEO_I/F
[CN3001-B28]
VENV_DET
[CN3001-B27]
S_DET_H
TO CHROMA
(3)
PB5V_POWER1
PB_VSS
PB_HSS
TO VIDEO_I/F
[CN3001-A9]
EVF_Y
[CN3001-A35]
PB_Y
[CN3001-B25]
PB_HSS
TO HEAD_AMP
(4)
REG_3R5V
TO CHROMA
(3)
REG_3R5V
TO CNR
(5)
PB_HSS
Y_DIFF
TO HEAD_AMP
(4)
PB5V_POWER2
REC_Y
TO VIDEO_I/F
[P3010-5]
VIDEO_OUT
[P3010-1]
Y
[P3010-3]
C
AV JACK(1:3)

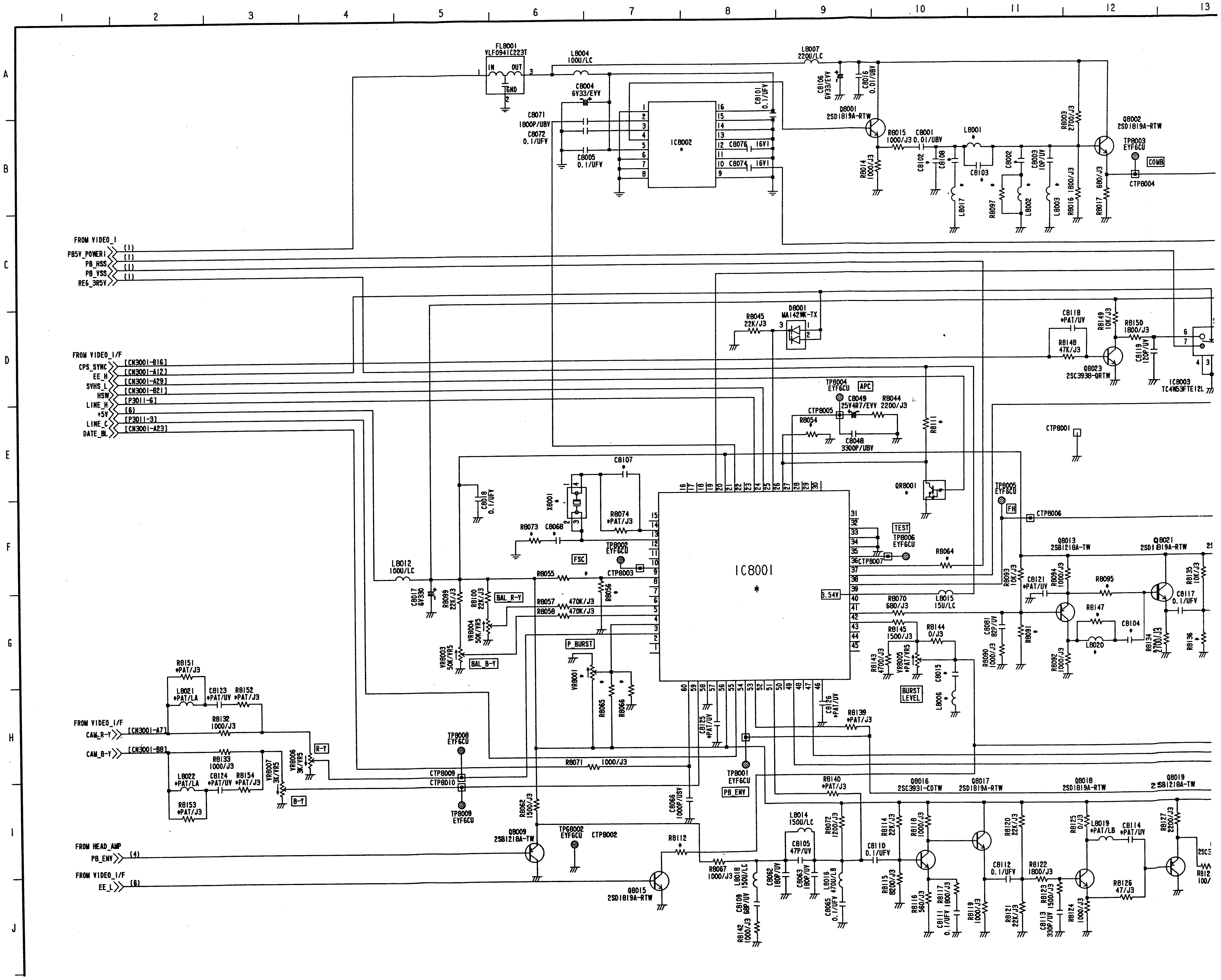
*=REFER TO THE COMPARISON CHART

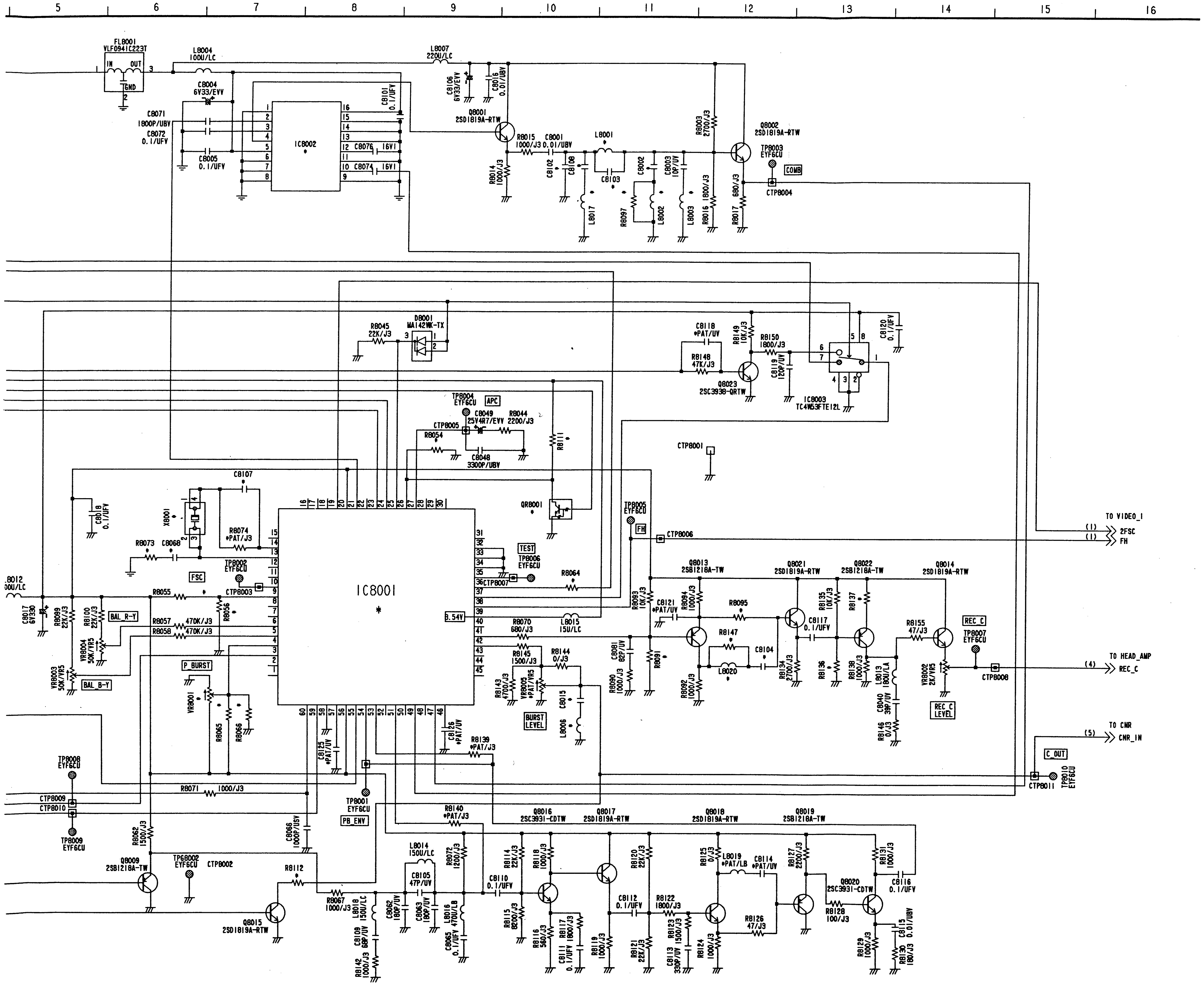
VIDEO 2 SCHEMATIC DIAGRAM 2／6 (E11:Page CBA-14)


1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
FROM VIDEO_I/F
VITC
[CN3001-A13]
FROM VIDEO_I/F
ANA_+9V
[CN3001-A36,B36]
L3048
100U/LC
C3347
0.1/UFV
C3348
16V47/EVV
FROM VIDEO_I/F
CAM_Y
[CN3001-B6]
FROM VIDEO_I/F
CPN_GND
[CN3001-B7]
VR3009
5K/VR5
CAM_Y
C3311
6V47/EVN
R3317
15K/J3
R3316
10K/J3
Q3040
2SD1819A-RTW
R3318
560/J3
R3319
220/J3
C3312
6V47/EVN
R3304
10/J3
R3320
15K/J3
R3321
10K/J3
Q3041
2SD1819A-RTW
R3322
3300/J3
R3323
470/J3
C3313
6V47/EVN
R3375
4700/J3
R3376
4700/J3
Q3048
2SD1819A-RTW
R3377
1500/J3
R3381
5600/J3
R3382
1000/J3
DL3001
*
4
1
3
2
R3383
1000/J3
FROM VIDEO_I/F
+5V
(6)
L3034
100U/LC
C3308
0.1/UFV
C3309
6V33/EVV
IC3007
MC14577BFR
3
2
8
4
1
IC3007
MC14577BFR
5
6
8
4
7
C3944
*PAT/UV
R3963
*PAT/J3
R3305
560/J3
R3330
560/J3
C3321
*PAT/UV
R3384
47/J3
TP3014
EYF6CU
Y&VITC
CTP3061
(3322
6V47/EVN


4
5
6
7
8
9
10
11
0.1/UFV
C3348
16V47/EVV
R3317
15K/J3
Q3040
2SD1819A-RTW
R3319
220/J3
R3320
15K/J3
Q3041
2SD1819A-RTW
R3323
470/J3
C3313
6V47/EVN
C3311
6V47/EVN
VR3009
5K/VR5
CAM_Y
R3316
10K/J3
R3318
560/J3
C3312
6V47/EVN
R3304
10/J3
R3321
10K/J3
R3322
3300/J3
R3375
4700/J3
Q3048
2SD1819A-RTW
R3376
4700/J3
R3377
1500/J3
(1)
TO VIDEO_I
EE_EVF
R3381
5600/J3
4
DL3001
*
1
3
2
R3382
1000/J3
R3383
1000/J3
0.1/UFV
C3309
6V33/EVV
IC3007
MC14577BFR
8
3
2
1
4
IC3007
MC14577BFR
8
5
6
7
4
TP3014
EYF6CU
Y&VITC
C3322
6V47/EVN
(1)
TO VIDEO_I
Y_VITC
R3384
47/J3
CTP3061
C3944
*PAT/UV
R3963
*PAT/J3
R3305
560/J3
R3330
560/J3
C3321
*PAT/UV

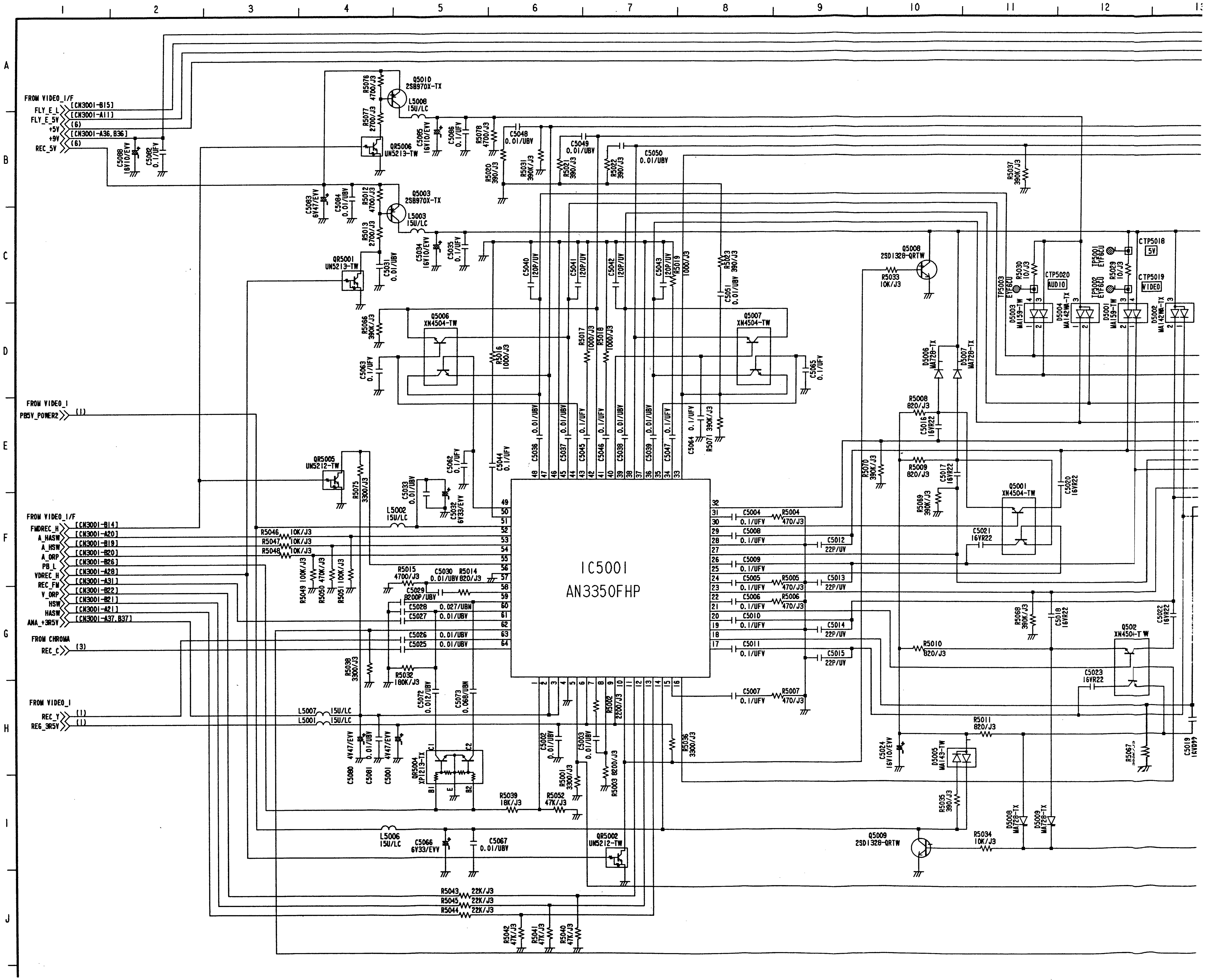
CHROMA SCHEMATIC CIAGRAM 3／6（E11:Page CBA-14）


1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I
J
FL8001
VLF0941C223T
IN
OUT
GND
L8004
100U/LC
C8004
6V33/EVV
C8071
1800P/UBV
C8072
0.1/UFV
C8005
0.1/UFV
IC8002
C8101
0.1/UFV
C8076
C8074
16V1
L8007
220U/LC
C8106
6V33/EVV
C8016
0.01/UBY
Q8001
2SD1819A-RTW
R8015
1000/J3
C8001
0.01/UBY
L8001
R8014
1000/J3
C8102
C8103
C8002
C8003
10P/UV
R8003
2700/J3
Q8002
2SD1819A-RTW
TP8003
EYF6CU
COMB
CTP8004
L8017
R8097
L8002
L8003
R8016 1800/J3
R8017 680/J3
FROM VIDEO_I
PB5V_POWER1
PB_HSS
PB_VSS
REG_3R5V
(1)
FROM VIDEO_I/F
CPS_SYNC
EE_H
SYHS_L
HSW
LINE_H
+5V
LINE_C
DATE_BL
[CN3001-B16]
[CN3001-A12]
[CN3001-A29]
[CN3001-B21]
[P3011-6]
(6)
[P3011-3]
[CN3001-A23]
R8045
22K/J3
D8001
MA142WK-TX
C8118
*PAT/UV
R8149
10K/J3
R8150
1800/J3
R8148
47K/J3
Q8023
2SC3938-QRTW
C8119
120P/UV
IC8003
TC4W53FTE12L
TP8004
EYF6CU
APC
C8049
25V4R7/EVV
R8044
2200/J3
CTP8005
R8054
C8048
3300P/UBV
R8111
CTP8001
C8107
X8001
R8074
*PAT/J3
R8073
C8068
TP8002
EYF6CU
FSC
CTP8003
R8055
R8056
R8057
470K/J3
R8058
470K/J3
L8012
100U/LC
C8017
6V330
C8018
0.1/UFV
R8099
22K/J3
R8100
22K/J3
BAL_R-Y
VR8004
50K/VR5
VR8003
50K/VR5
BAL_B-Y
P_BURST
VR8001
R8065
R8066
IC8001
3.54V
QR8001
TEST
TP8006
EYF6CU
CTP8007
R8064
R8070
680/J3
L8015
15U/LC
R8145
1500/J3
R8144
0/J3
R8143
4700/J3
VR8005
*PAT/VR5
C8015
L8006
BURST
LEVEL
TP8005
EYF6CU
FH
CTP8006
Q8013
2SB1218A-TW
Q8021
2SD1819A-RTW
R8093
10K/J3
C8121
*PAT/UV
R8094
1000/J3
R8095
C8117
0.1/UFV
R8135
10K/J3
R8147
C8104
L8020
C8081
82P/UV
R8091
R8090
1000/J3
R8092
1000/J3
R8134
2700/J3
R8136
R8151
*PAT/J3
L8021
*PAT/LA
C8123
*PAT/UV
R8152
*PAT/J3
R8132
1000/J3
FROM VIDEO_I/F
CAM_R-Y
CAM_B-Y
[CN3001-A7]
[CN3001-B8]
R8133
1000/J3
L8022
*PAT/LA
C8124
*PAT/UV
R8154
*PAT/J3
R8153
*PAT/J3
VR8007
3K/VR5
VR8006
3K/VR5
R-Y
B-Y
TP8008
EYF6CU
CTP8009
CTP8010
TP8009
EYF6CU
R8071
1000/J3
C8125
*PAT/UV
C8126
*PAT/UV
R8139
*PAT/J3
TP8001
EYF6CU
PB_ENV
C8066
1000P/USY
R8062
1500/J3
Q8009
2SB1218A-TW
TP8002
EYF6CU
CTP8002
FROM HEAD_AMP
PB_ENV
(4)
FROM VIDEO_I/F
EE_L
(6)
R8112
Q8015
2SD1819A-RTW
R8067
1000/J3
L8018
150U/LC
C8109
68P/UV
R8142
1000/J3
C8062
180P/UV
C8063
180P/UV
L8014
150U/LC
C8105
47P/UV
R8072
1200/J3
L8016
470U/LB
C8065
0.1/UFV
R8140
*PAT/J3
Q8016
2SC3931-CDTW
Q8017
2SD1819A-RTW
Q8018
2SD1819A-RTW
Q8019
2SB1218A-TW
R8114
22K/J3
R8118
1000/J3
C8110
0.1/UFV
R8115
8200/J3
R8116
560/J3
C8111
0.1/UFV
R8117
1800/J3
R8119
1000/J3
R8120
22K/J3
C8112
0.1/UFV
R8121
22K/J3
C8113
330P/UV
R8122
1800/J3
R8123
1500/J3
R8124
1000/J3
R8125
0/J3
L8019
*PAT/LB
C8114
*PAT/UV
R8126
47/J3
R8127
2200/J3


5
6
7
8
9
10
11
12
13
14
15
16
FL8001
VLF0941C223T
IN
OUT
GND
L8004
100U/LC
C8004
6V33/EVV
C8071
1800P/UBY
C8072
0.1/UFV
C8005
0.1/UFV
IC8002
C8076
C8074
16V1
C8101
0.1/UFV
L8007
220U/LC
C8106
6V33/EVV
C8016
0.01/UBY
Q8001
2SD1819A-RTW
R8015
1000/J3
C8001
0.01/UBY
R8014
1000/J3
C8102
C8108
L8001
C8103
L8017
R8097
C8002
L8002
C8003
10P/UV
L8003
R8016
1800/J3
R8003
2700/J3
Q8002
2SD1819A-RTW
R8017
680/J3
TP8003
EYF6CU
COMB
CTP8004
D8001
MA142WK-TX
R8045
22K/J3
C8118
*PAT/UV
R8149
10K/J3
R8150
1800/J3
R8148
47K/J3
Q8023
2SC3938-QRTW
C8119
120P/UV
IC8003
TC4W53FTE12L
C8120
0.1/UFV
TP8004
EYF6CU
APC
C8049
25V4R7/EVV
R8044
2200/J3
CTP8005
R8054
C8048
3300P/UBY
R8111
CTP8001
C8107
X8001
C8018
0.1/UFV
R8074
*PAT/J3
R8073
C8068
TP8002
EYF6CU
FSC
CTP8003
QR8001
TP8005
EYF6CU
FH
CTP8006
TEST
TP8006
EYF6CU
CTP8007
R8064
IC8001
3.54V
L8012
00U/LC
C8017
6V330
R8099
22K/J3
R8100
22K/J3
BAL_R-Y
VR8004
50K/YR5
VR8003
50K/YR5
BAL_B-Y
R8055
R8056
R8057
470K/J3
R8058
470K/J3
P_BURST
VR8001
R8065
R8066
R8070
680/J3
L8015
15U/LC
R8145
1500/J3
R8144
0/J3
R8143
4700/J3
VR8005
*PAT/YR5
BURST LEVEL
C8015
L8006
C8081
82P/UV
R8090
1000/J3
R8093
10K/J3
R8091
C8121
*PAT/UV
Q8013
2SB1218A-TW
R8094
1000/J3
R8095
R8092
1000/J3
R8147
L8020
C8104
Q8021
2SD1819A-RTW
C8117
0.1/UFV
R8134
2700/J3
R8135
10K/J3
R8136
Q8022
2SB1218A-TW
R8137
R8138
1000/J3
L8013
180U/LA
C8040
39P/UV
R8146
0/J3
R8155
47/J3
Q8014
2SD1819A-RTW
VR8002
2K/YR5
REC_C
TP8007
EYF6CU
CTP8008
REC_C LEVEL
TO VIDEO_I
(1) 2FSC
(1) FH
TO HEAD_AMP
(4) REC_C
TO CNR
(5) CNR_IN
C_OUT
CTP8011
TP8010
EYF6CU
C8125
*PAT/UV
C8126
*PAT/UV
R8139
*PAT/J3
TP8001
EYF6CU
PB_ENV
TP8008
EYF6CU
CTP8009
CTP8010
TP8009
EYF6CU
R8071
1000/J3
R8062
1500/J3
Q8009
2SB1218A-TW
TP8002
EYF6CU
CTP8002
C8066
1000P/UBY
R8112
Q8015
2SD1819A-RTW
R8067
1000/J3
L8018
150U/LC
C8109
68P/UV
R8142
1000/J3
C8062
180P/UV
L8014
150U/LC
C8105
47P/UV
C8063
180P/UV
L8016
470U/LB
C8065
0.1/UFV
R8072
1200/J3
R8140
*PAT/J3
C8110
0.1/UFV
Q8016
2SC3931-CDTW
R8114
22K/J3
R8118
1000/J3
R8115
8200/J3
R8116
560/J3
C8111
0.1/UFV
R8117
1800/J3
R8119
1000/J3
Q8017
2SD1819A-RTW
R8120
22K/J3
C8112
0.1/UFV
R8121
22K/J3
R8122
1800/J3
C8113
330P/UV
R8123
1500/J3
R8124
1000/J3
Q8018
2SD1819A-RTW
R8125
0/J3
L8019
*PAT/LB
C8114
*PAT/UV
R8126
47/J3
R8127
2200/J3
Q8019
2SB1218A-TW
Q8020
2SC3931-CDTW
R8128
100/J3
R8131
1000/J3
C8116
0.1/UFV
R8129
1000/J3
R8130
180/J3
C8115
0.01/UBY

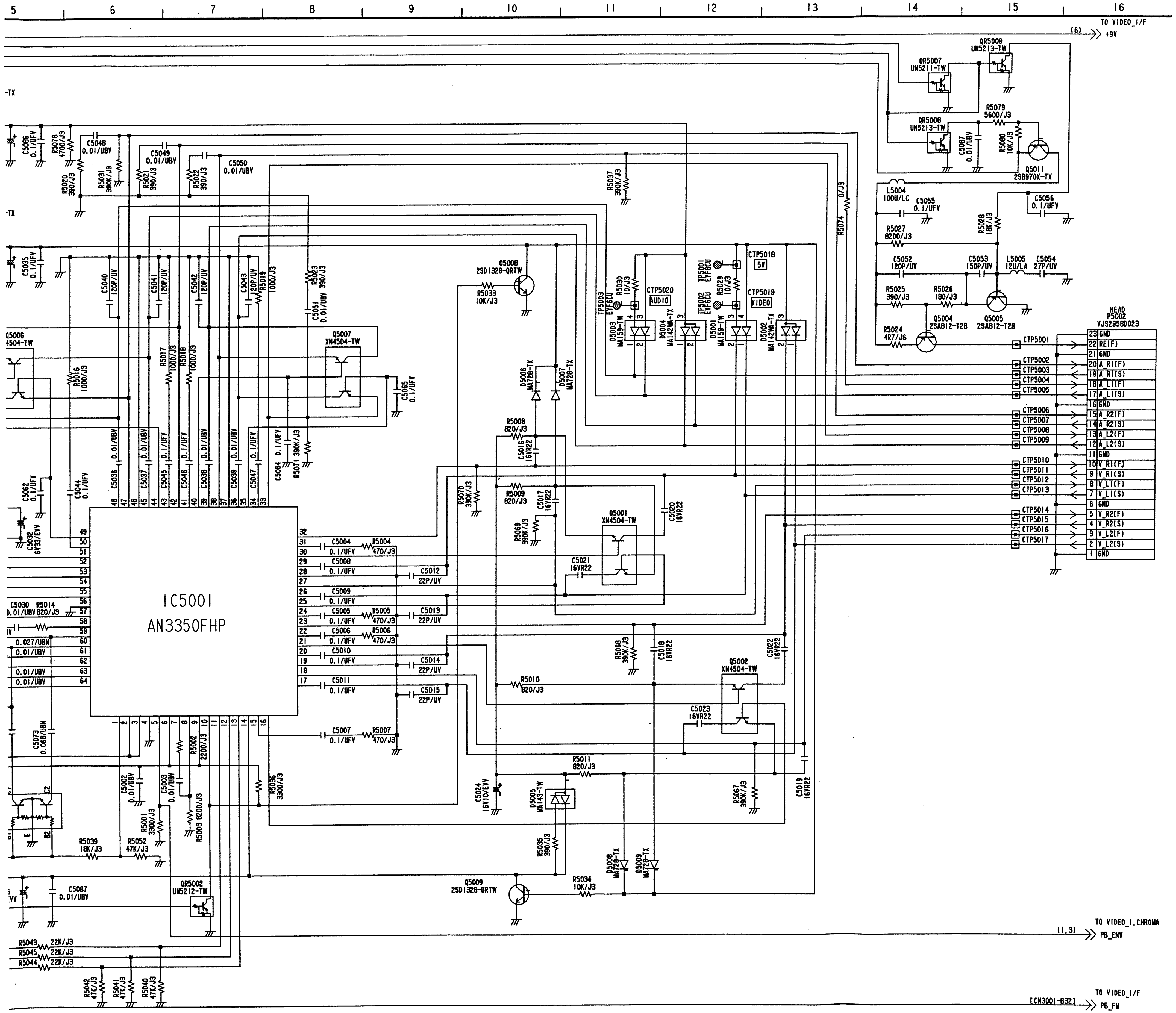
*=REFER TO THE COMPARISON CHART

HEAD AMP SCHEMATIC DIAGRAM 4／6（E11:Page CBA-14）

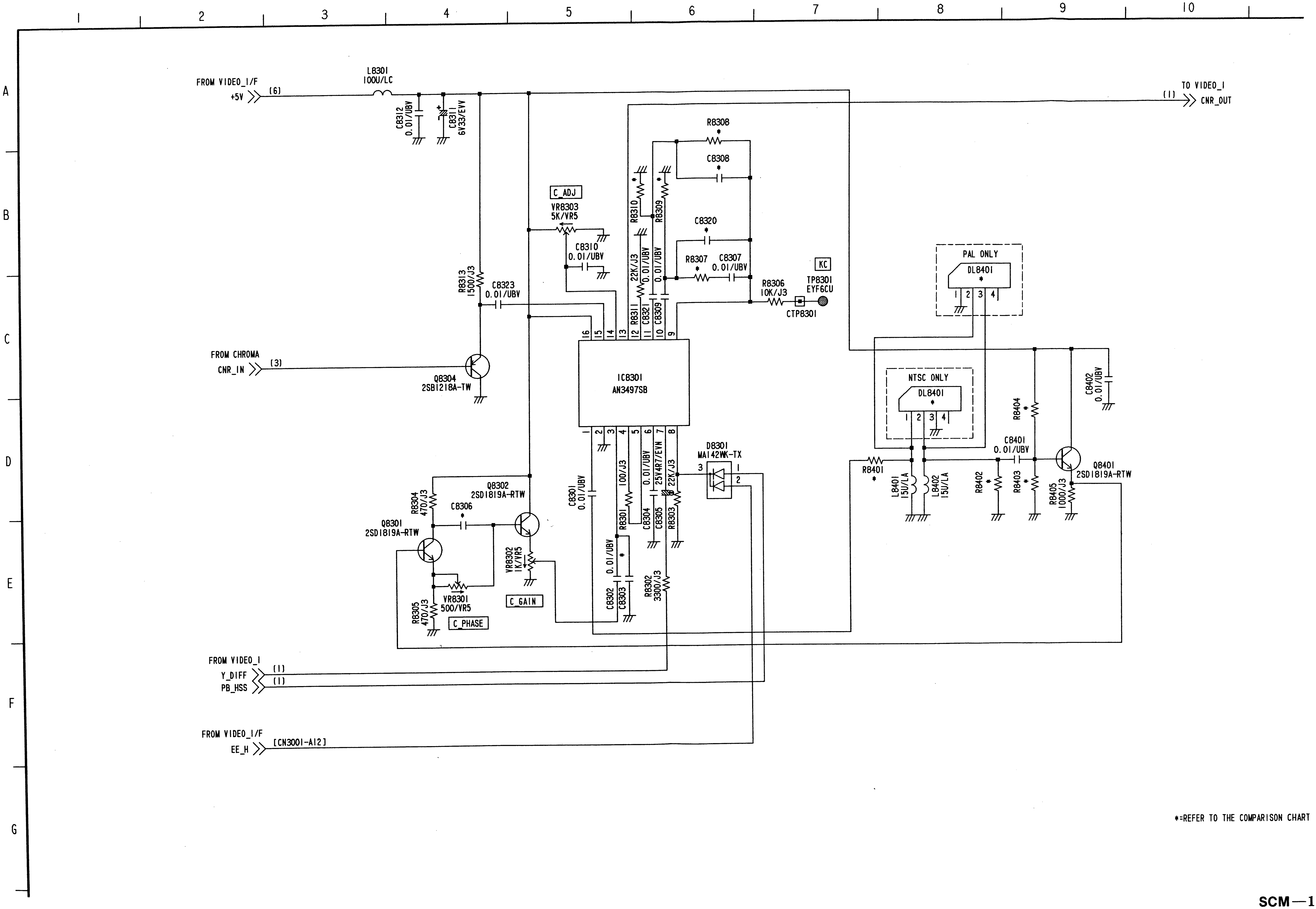


1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
J
FROM VIDEO_I/F
FLY_E_L [CN3001-B15]
FLY_E_5V [CN3001-A11]
+5V (6)
+9V [CN3001-A36,B36]
REC_5V (6)
FROM VIDEO_I
PB5V_POWER2 (1)
FROM VIDEO_I/F
FMDREC_H [CN3001-B14]
A_HASW [CN3001-A20]
A_HSW [CN3001-B19]
A_ORP [CN3001-B20]
PB_L [CN3001-B26]
VDREC_H [CN3001-A28]
REC_FM [CN3001-A31]
V_ORP [CN3001-B22]
HSW [CN3001-B21]
HASW [CN3001-A21]
ANA_+3R5V [CN3001-A37,B37]
FROM CHROMA
REC_C (3)
FROM VIDEO_I
REC_Y (1)
REG_3R5V (1)
IC5001
AN3350FHP
Q5010 2SB970X-TX
Q5003 2SB970X-TX
QR5006 UN5213-TW
QR5001 UN5213-TW
Q5006 XN4504-TW
Q5007 XN4504-TW
QR5005 UN5212-TW
QR5004 XP1213-TX
QR5002 UN5212-TW
Q5008 2SD1328-QRTW
Q5009 2SD1328-QRTW
Q5001 XN4504-TW
Q502 XN4501-TW
D5003 MA159-TW
D5004 MA142WA-TX
D5001 MA159-TW
D5002 MA142WA-TX
D5006 MA728-TX
D5007 MA728-TX
D5005 MA143-TW
D5008 MA728-TX
D5009 MA728-TX
TP5003 EYF6CU
TP5001 EYF6CU
TP5002 EYF6CU
CTP5020 AUDIO
CTP5018 5V
CTP5019 VIDEO
L5008 15U/LC
L5003 15U/LC
L5002 15U/LC
L5007 15U/LC
L5001 15U/LC
L5006 15U/LC
R5076 4700/J3
R5077 2700/J3
R5012 4700/J3
R5013 2700/J3
R5078 4700/J3
R5020 390/J3
R5031 390K/J3
R5021 390/J3
R5022 390/J3
R5037 390K/J3
R5030 10/J3
R5029 10/J3
R5033 10K/J3
R5066 390K/J3
R5016 1000/J3
R5017 1000/J3
R5018 1000/J3
R5019 1000/J3
R5023 390/J3
R5071 390K/J3
R5008 820/J3
R5009 820/J3
R5070 390K/J3
R5069 390K/J3
R5075 3300/J3
R5046 10K/J3
R5047 10K/J3
R5048 10K/J3
R5049 100K/J3
R5050 470K/J3
R5051 100K/J3
R5015 4700/J3
R5014 820/J3
R5004 470/J3
R5005 470/J3
R5006 470/J3
R5007 470/J3
R5068 390K/J3
R5010 820/J3
R5038 3300/J3
R5032 180K/J3
R5002 2200/J3
R5001 3300/J3
R5003 8200/J3
R5036 3300/J3
R5039 18K/J3
R5052 47K/J3
R5011 820/J3
R5067
R5035 390/J3
R5034 10K/J3
R5043 22K/J3
R5045 22K/J3
R5044 22K/J3
R5042 47K/J3
R5041 47K/J3
R5040 47K/J3
C5088 16V10/EVV
C5082 0.1/UFV
C5085 16V10/EVV
C5086 0.1/UFV
C5048 0.01/UBV
C5049 0.01/UBV
C5050 0.01/UBV
C5083 6V47/EVV
C5084 0.01/UBV
C5031 0.01/UBV
C5034 16V10/EVV
C5035 0.1/UFV
C5040 120P/UV
C5041 120P/UV
C5042 120P/UV
C5043 120P/UV
C5051 0.01/UBV
C5063 0.1/UFV
C5065 0.1/UFV
C5036 0.01/UBV
C5037 0.01/UBV
C5045 0.1/UFV
C5046 0.1/UFV
C5038 0.01/UBV
C5039 0.01/UBV
C5047 0.1/UFV
C5064 0.1/UFV
C5044 0.1/UFV
C5062 0.1/UFV
C5033 0.01/UBV
C5032 6V33/EVV
C5016 16VR22
C5017 16VR22
C5020 16VR22
C5021 16VR22
C5018 16VR22
C5022 16VR22
C5023 16VR22
C5019
C5030 0.01/UBV
C5029 8200P/UBV
C5028 0.027/UBN
C5027 0.01/UBV
C5026 0.01/UBV
C5025 0.01/UBV
C5004 0.1/UFV
C5008 0.1/UFV
C5012 22P/UV
C5009 0.1/UFV
C5005 0.1/UFV
C5013 22P/UV
C5006 0.1/UFV
C5010 0.1/UFV
C5014 22P/UV
C5011 0.1/UFV
C5015 22P/UV
C5007 0.1/UFV
C5072 0.012/UBV
C5073 0.068/UBN
C5080 4V47/EVV
C5081 0.01/UBV
C5001 4V47/EVV
C5002 0.01/UBV
C5003 0.01/UBV
C5024 16V10/EVV
C5066 6V33/EVV
C5067 0.01/UBV

E11:Page CBA-14)

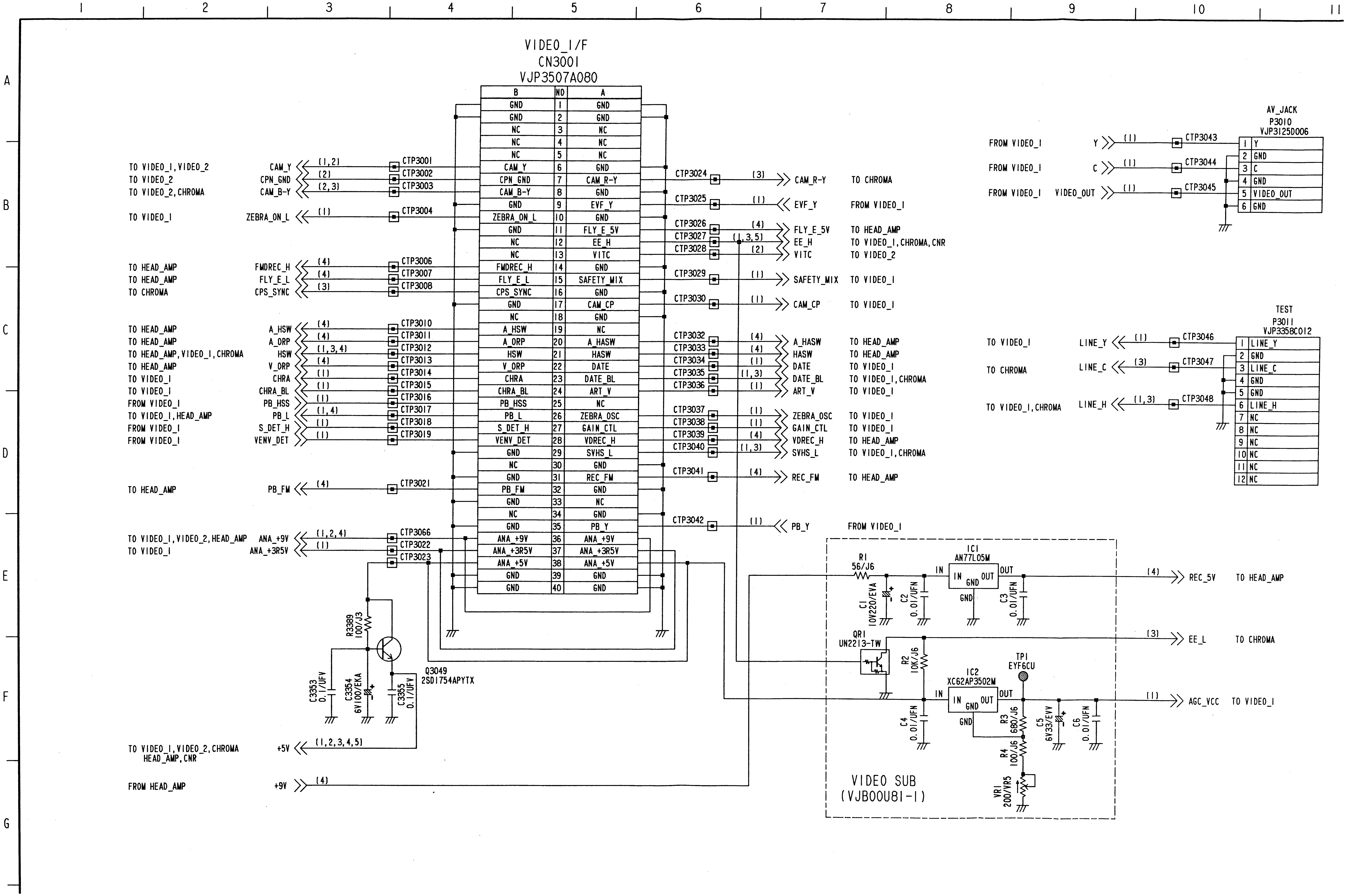

5
6
7
8
9
10
11
12
13
14
15
16
TO VIDEO_I/F
(6)
+9V
QR5009
UN5213-TW
QR5007
UN5211-TW
QR5008
UN5213-TW
R5079
5600/J3
C5087
0.01/UBY
R5080
10K/J3
Q5011
2SB970X-TX
L5004
100U/LC
C5055
0.1/UFV
C5056
0.1/UFV
R5028
18K/J3
R5027
8200/J3
C5052
120P/UV
C5053
150P/UV
L5005
12U/LA
C5054
27P/UV
R5025
390/J3
R5026
180/J3
Q5004
2SA812-T2B
Q5005
2SA812-T2B
R5024
4R7/J6
HEAD
P5002
VJS2956D023
CTP5001
CTP5002
CTP5003
CTP5004
CTP5005
CTP5006
CTP5007
CTP5008
CTP5009
CTP5010
CTP5011
CTP5012
CTP5013
CTP5014
CTP5015
CTP5016
CTP5017
23 GND
22 RE(F)
21 GND
20 A_R1(F)
19 A_R1(S)
18 A_L1(F)
17 A_L1(S)
16 GND
15 A_R2(F)
14 A_R2(S)
13 A_L2(F)
12 A_L2(S)
11 GND
10 V_R1(F)
9 V_R1(S)
8 V_L1(F)
7 V_L1(S)
6 GND
5 V_R2(F)
4 V_R2(S)
3 V_L2(F)
2 V_L2(S)
1 GND
-TX
C5086
0.1/UFV
R5078
4700/J3
C5048
0.01/UBY
C5049
0.01/UBY
C5050
0.01/UBY
R5020
390/J3
R5031
390K/J3
R5021
390/J3
R5022
390/J3
R5037
390K/J3
0/J3
R5074
C5035
0.1/UFV
C5040
120P/UV
C5041
120P/UV
C5042
120P/UV
C5043
120P/UV
R5019
1000/J3
R5023
390/J3
C5051
0.01/UBV
Q5008
2SD1328-QRTW
R5033
10K/J3
TP5003
EYF6CU
R5030
10/J3
CTP5020
AUDIO
TP5001
EYF6CU
TP5002
EYF6CU
R5029
10/J3
CTP5018
5V
CTP5019
VIDEO
D5003
MA159-TW
D5004
MA142WA-TX
D5001
MA159-TW
D5002
MA142WA-TX
Q5006
XN4504-TW
Q5007
XN4504-TW
R5016
1000/J3
R5017
1000/J3
R5018
1000/J3
C5065
0.1/UFV
D5006
MA728-TX
D5007
MA728-TX
R5008
820/J3
C5016
16VR22
C5036 0.01/UBV
C5037 0.01/UBV
C5045 0.1/UFV
C5046 0.1/UFV
C5038 0.01/UBV
C5039 0.01/UBV
C5047 0.1/UFV
C5064 0.1/UFV
R5071 390K/J3
C5062
0.1/UFV
C5044
0.1/UFV
C5032
6V33/EVV
R5070
390K/J3
R5009
820/J3
C5017
16VR22
R5069
390K/J3
C5020
16VR22
Q5001
XN4504-TW
C5021
16VR22
IC5001
AN3350FHP
C5004
0.1/UFV
R5004
470/J3
C5008
0.1/UFV
C5012
22P/UV
C5009
0.1/UFV
C5005
0.1/UFV
R5005
470/J3
C5013
22P/UV
C5006
0.1/UFV
R5006
470/J3
C5010
0.1/UFV
C5014
22P/UV
C5011
0.1/UFV
C5015
22P/UV
C5030
0.01/UBV
R5014
820/J3
0.027/UBN
0.01/UBV
0.01/UBV
0.01/UBV
R5068
390K/J3
C5018
16VR22
C5022
16VR22
Q5002
XN4504-TW
R5010
820/J3
C5023
16VR22
C5073
0.068/UBN
C5007
0.1/UFV
R5007
470/J3
R5002
2200/J3
C5002
0.01/UBV
C5003
0.01/UBV
R5036
3300/J3
R5011
820/J3
C5024
16V10/EVV
D5005
MA143-TW
R5067
390K/J3
C5019
16VR22
R5001
3300/J3
R5003
8200/J3
E
B2
C2
R5039
18K/J3
R5052
47K/J3
R5035
390/J3
D5008
MA728-TX
D5009
MA728-TX
C5067
0.01/UBV
QR5002
UN5212-TW
Q5009
2SD1328-QRTW
R5034
10K/J3
TO VIDEO_I, CHROMA
(1,3)
PB_ENV
R5043
22K/J3
R5045
22K/J3
R5044
22K/J3
R5042
47K/J3
R5041
47K/J3
R5040
47K/J3
TO VIDEO_I/F
[CN3001-B32]
PB_FM

CNR SCHEMATIC DIAGRAM 5／6（E14:Page CBA-14）


1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
FROM VIDEO_I/F
+5V
(6)
L8301
100U/LC
C8312
0.01/UBV
C8311
6V33/EVV
TO VIDEO_I
(1)
CNR_OUT
R8308
*
C8308
*
R8310
*
R8309
*
C8320
*
C_ADJ
VR8303
5K/VR5
C8310
0.01/UBV
R8307
*
C8307
0.01/UBV
22K/J3
0.01/UBV
0.01/UBV
R8311
C8321
C8309
R8306
10K/J3
KC
TP8301
EYF6CU
CTP8301
R8313
1500/J3
C8323
0.01/UBV
PAL ONLY
DL8401
*
FROM CHROMA
CNR_IN
(3)
Q8304
2SB1218A-TW
IC8301
AN3497SB
16
15
14
13
12
11
10
9
1
2
3
4
5
6
7
8
NTSC ONLY
DL8401
*
R8404
*
C8402
0.01/UBV
C8401
0.01/UBV
Q8401
2SD1819A-RTW
R8401
*
L8401
15U/LA
L8402
15U/LA
R8402
*
R8403
*
R8405
1000/J3
D8301
MA142WK-TX
C8301
0.01/UBV
100/J3
0.01/UBV
25V4R7/EVN
22K/J3
R8301
C8304
C8305
R8303
Q8302
2SD1819A-RTW
R8304
470/J3
C8306
*
Q8301
2SD1819A-RTW
VR8302
1K/VR5
C_GAIN
VR8301
500/VR5
C_PHASE
R8305
470/J3
0.01/UBV
*
C8302
C8303
R8302
3300/J3
FROM VIDEO_I
Y_DIFF
PB_HSS
(1)
(1)
FROM VIDEO_I/F
EE_H
[CN3001-A12]

*=REFER TO THE COMPARISON CHART

VIDEO I／F SCHEMATIC DIAGRAM 6／6 (E14:Page CBA-14)



1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
VIDEO_I/F
CN3001
VJP3507A080
B NO A
GND 1 GND
GND 2 GND
NC 3 NC
NC 4 NC
NC 5 NC
CAM_Y 6 GND
CPN_GND 7 CAM_R-Y
CAM_B-Y 8 GND
GND 9 EVF_Y
ZEBRA_ON_L 10 GND
GND 11 FLY_E_5V
NC 12 EE_H
NC 13 VITC
FMDREC_H 14 GND
FLY_E_L 15 SAFETY_MIX
CPS_SYNC 16 GND
GND 17 CAM_CP
NC 18 GND
A_HSW 19 NC
A_ORP 20 A_HASW
HSW 21 HASW
V_ORP 22 DATE
CHRA 23 DATE_BL
CHRA_BL 24 ART_V
PB_HSS 25 NC
PB_L 26 ZEBRA_OSC
S_DET_H 27 GAIN_CTL
VENV_DET 28 VDREC_H
GND 29 SVHS_L
NC 30 GND
GND 31 REC_FM
PB_FM 32 GND
GND 33 NC
NC 34 GND
GND 35 PB_Y
ANA_+9V 36 ANA_+9V
ANA_+3R5V 37 ANA_+3R5V
ANA_+5V 38 ANA_+5V
GND 39 GND
GND 40 GND
TO VIDEO_I, VIDEO_2 CAM_Y (1,2) CTP3001
TO VIDEO_2 CPN_GND (2) CTP3002
TO VIDEO_2, CHROMA CAM_B-Y (2,3) CTP3003
TO VIDEO_I ZEBRA_ON_L (1) CTP3004
TO HEAD_AMP FMDREC_H (4) CTP3006
TO HEAD_AMP FLY_E_L (4) CTP3007
TO CHROMA CPS_SYNC (3) CTP3008
TO HEAD_AMP A_HSW (4) CTP3010
TO HEAD_AMP A_ORP (4) CTP3011
TO HEAD_AMP, VIDEO_I, CHROMA HSW (1,3,4) CTP3012
TO HEAD_AMP V_ORP (4) CTP3013
TO VIDEO_I CHRA (1) CTP3014
TO VIDEO_I CHRA_BL (1) CTP3015
FROM VIDEO_I PB_HSS (1) CTP3016
TO VIDEO_I, HEAD_AMP PB_L (1,4) CTP3017
FROM VIDEO_I S_DET_H (1) CTP3018
FROM VIDEO_I VENV_DET (1) CTP3019
TO HEAD_AMP PB_FM (4) CTP3021
TO VIDEO_I, VIDEO_2, HEAD_AMP ANA_+9V (1,2,4) CTP3066
TO VIDEO_I ANA_+3R5V (1) CTP3022
CTP3023
CTP3024 (3) CAM_R-Y TO CHROMA
CTP3025 (1) EVF_Y FROM VIDEO_I
CTP3026 (4) FLY_E_5V TO HEAD_AMP
CTP3027 (1,3,5) EE_H TO VIDEO_I, CHROMA, CNR
CTP3028 (2) VITC TO VIDEO_2
CTP3029 (1) SAFETY_MIX TO VIDEO_I
CTP3030 (1) CAM_CP TO VIDEO_I
CTP3032 (4) A_HASW TO HEAD_AMP
CTP3033 (4) HASW TO HEAD_AMP
CTP3034 (1) DATE TO VIDEO_I
CTP3035 (1,3) DATE_BL TO VIDEO_I, CHROMA
CTP3036 (1) ART_V TO VIDEO_I
CTP3037 (1) ZEBRA_OSC TO VIDEO_I
CTP3038 (1) GAIN_CTL TO VIDEO_I
CTP3039 (4) VDREC_H TO HEAD_AMP
CTP3040 (1,3) SVHS_L TO VIDEO_I, CHROMA
CTP3041 (4) REC_FM TO HEAD_AMP
CTP3042 (1) PB_Y FROM VIDEO_I
R3389 100/J3
Q3049 2SD1754APYTX
C3353 0.1/UFV
C3354 6V100/EKA
C3355 0.1/UFV
TO VIDEO_I, VIDEO_2, CHROMA HEAD_AMP, CNR +5V (1,2,3,4,5)
FROM HEAD_AMP +9V (4)
AV_JACK
P3010
VJP3125D006
FROM VIDEO_I Y (1) CTP3043
FROM VIDEO_I C (1) CTP3044
FROM VIDEO_I VIDEO_OUT (1) CTP3045
1 Y
2 GND
3 C
4 GND
5 VIDEO_OUT
6 GND
TEST
P3011
VJP3358C012
TO VIDEO_I LINE_Y (1) CTP3046
TO CHROMA LINE_C (3) CTP3047
TO VIDEO_I, CHROMA LINE_H (1,3) CTP3048
1 LINE_Y
2 GND
3 LINE_C
4 GND
5 GND
6 LINE_H
7 NC
8 NC
9 NC
10 NC
11 NC
12 NC
R1 56/J6
IC1 AN77L05M
IN OUT GND
C1 10V220/EVA
C2 0.01/UFN
C3 0.01/UFN
(4) REC_5V TO HEAD_AMP
QR1 UN2213-TW
R2 10K/J6
(3) EE_L TO CHROMA
TP1 EYF6CU
IC2 XC62AP3502M
(1) AGC_VCC TO VIDEO_I
C4 0.01/UFN
R3 680/J6
C5 6V33/EVV
C6 0.01/UFN
R4 100/J6
VR1 200/VR5
VIDEO SUB
(VJB00U81-1)

VIDEO COMPARISON CHART (E14:Page CBA-14)

REF	NTSC	PAL
C3005	22P/UV	15P/UV
C3036	27P/UV	33P/UV
C3061	12P/UV	15P/UV
C3071	68P/UV	82P/UV
C3083	18P/UV	*PAT/UV
C3203	82P/UV	68P/UV
C3215	*PAT/UBV	*PAT/UBV
C3321	*PAT/UV	*PAT/UV
C3329	*PAT/UV	*PAT/UV
C3332	*PAT/UV	*PAT/UV
C3334	15P/UV	*PAT/UV
C3335	0.01/UBV	*PAT/UBV
C3336	68P/UV	*PAT/UV
C3337	270P/UV	82P/UV
C3338	0/J3	180P/UV
C3339	220P/UV	*PAT/UV
C3343	*PAT/UV	*PAT/UV
C3344	*PAT/UV	*PAT/UV
C3345	*PAT/UV	*PAT/UV
C3351	*PAT/UV	*PAT/UV
C3944	*PAT/UV	*PAT/UV
C8002	39P/UV	6P/UV
C8015	150P/UV	0.1/UFV
C8068	0.01/UBV	*PAT/UBV
C8102	39P/UV	33P/UV
C8103	3P/UV	12P/UV
C8104	330P/UV	390P/UV
C8107	100P/UV	150P/UV
C8108	*PAT/UV	*PAT/UV
C8114	*PAT/UV	*PAT/UV
C8118	*PAT/UV	*PAT/UV
C8121	*PAT/UV	*PAT/UV
C8123	*PAT/UV	*PAT/UV
C8124	*PAT/UV	*PAT/UV
C8125	*PAT/UV	*PAT/UV
C8126	*PAT/UV	*PAT/UV
C8303	*PAT/UV	120P/UV
C8306	270P/UV	470P/UV
C8308	18P/UV	33P/UV
C8313	*PAT/UBV	0.01/UBV
C8314	*PAT/UV	82P/UV
C8315	*PAT/UV	18P/UV
C8316	*PAT	16V1
C8317	*PAT	16V1
C8318	*PAT	16V1
C8319	*PAT/EVV	6V33/EVV

REF	NTSC	PAL
C8320	10P/UV	18P/UV
C8322	*PAT/UBV	0.01/UBV
DL3001	ELB4C559	ELB4C560
DL3002	ELB4D553	*PAT
DL8401	VLD0151	VLD0089
IC3001	VEFH25C	VEFH25D
IC3002	TL8837FEL	TL8819FEL
IC8001	VEFH26E	VEFH26B
IC8002	TL8832FTP1	TL8833FTP1
IC8302	*PAT	TL8819FEL
L3020	82U/LA	*PAT/LA
L3021	33U	39U
L3038	*PAT/LA	*PAT/LA
L3041	*PAT/LA	82U/LA
L3042	39U	*PAT
L3043	33U	*PAT
L3044	220U/LA	*PAT/LA
L3045	82U/LA	150U/LA
L3046	220U/LA	*PAT/LA
L8001	39U	27U
L8002	*PAT	10U
L8003	6R8U	10U
L8006	82U	33U
L8017	*PAT/LC	*PAT/LC
L8019	*PAT/LB	*PAT/LB
L8020	*PAT/LA	15U/LA
L8021	*PAT/LA	*PAT/LA
L8022	*PAT/LA	*PAT/LA
L8302	*PAT/LA	100U/LA
Q8303	*PAT	2SD1819A-RTW
QR3011	*PAT	UN5212-TW
QR8001	*PAT	UN5212-TW
R3031	390/J3	150/J3
R3045	22K/J3	8200/J3
R3056	*PAT/J3	1000/J3
R3073	1500/J3	1200/J3
R3079	470/J3	220/J3
R3109	470/J3	1800/J3
R3118	*PAT/J3	10K/J3
R3139	0/J3	*PAT/J3
R3201	5600/J3	33K/J3
R3329	*PAT/J3	0/J3
R3351	*PAT/J3	*PAT/J3
R3354	*PAT/J3	*PAT/J3
R3357	330/J3	1000/J3
R3358	680/J3	*PAT/J3

6R8U=VLQ0426J6R8
10U=VLQ0426J100
27U=VLQ0426J270
33U=VLQ0426J330
39U=VLQ0426J390
82U=VLQ0426J820

=====================================

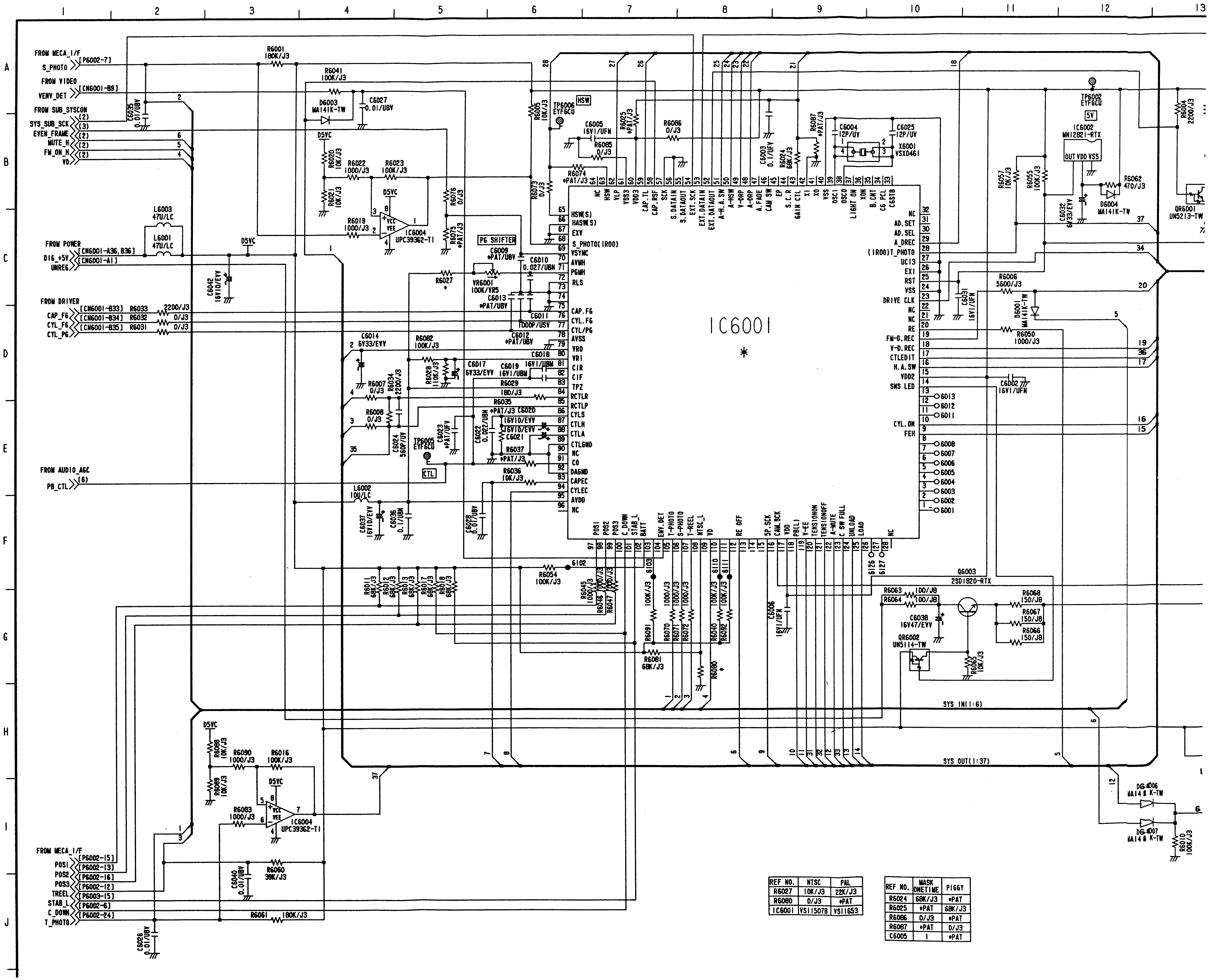
REF	NTSC	PAL
C8320	10P/UV	18P/UV
C8322	*PAT/UBV	0.01/UBV
DL3001	ELB4C559	ELB4C560
DL3002	ELB4D553	*PAT
DL8401	VLD0151	VLD0089
IC3001	VEFH25C	VEFH25D
IC3002	TL8837FEL	TL8819FEL
IC8001	VEFH26E	VEFH26B
IC8002	TL8832FTP1	TL8833FTP1
IC8302	*PAT	TL8819FEL
L3020	82U/LA	*PAT/LA
L3021	33U	39U
L3038	*PAT/LA	*PAT/LA
L3041	*PAT/LA	82U/LA
L3042	39U	*PAT
L3043	33U	*PAT
L3044	220U/LA	*PAT/LA
L3045	82U/LA	150U/LA
L3046	220U/LA	*PAT/LA
L8001	39U	27U
L8002	*PAT	10U
L8003	6R8U	10U
L8006	82U	33U
L8017	*PAT/LC	*PAT/LC
L8019	*PAT/LB	*PAT/LB
L8020	*PAT/LA	15U/LA
L8021	*PAT/LA	*PAT/LA
L8022	*PAT/LA	*PAT/LA
L8302	*PAT/LA	100U/LA
Q8303	*PAT	2SD1819A-RTW
QR3011	*PAT	UN5212-TW
QR8001	*PAT	UN5212-TW
R3031	390/J3	150/J3
R3045	22K/J3	8200/J3
R3056	*PAT/J3	1000/J3
R3073	1500/J3	1200/J3
R3079	470/J3	220/J3
R3109	470/J3	1800/J3
R3118	*PAT/J3	10K/J3
R3139	0/J3	*PAT/J3
R3201	5600/J3	33K/J3
R3329	*PAT/J3	0/J3
R3351	*PAT/J3	*PAT/J3
R3354	*PAT/J3	*PAT/J3
R3357	330/J3	1000/J3
R3358	680/J3	*PAT/J3

6R8U=VLQ0426J6R8
10U=VLQ0426J100
27U=VLQ0426J270
33U=VLQ0426J330
39U=VLQ0426J390
82U=VLQ0426J820

=====================================

REF	NTSC	PAL
R3359	*PAT/J3	0/J3
R3360	0/J3	*PAT/J3
R3361	470/J3	*PAT/J3
R3363	*PAT/J3	0/J3
R3369	*PAT/J3	*PAT/J3
R3388	*PAT/J3	*PAT/J3
R3963	*PAT/J3	*PAT/J3
R8054	0/J3	4700/J3
R8055	120K/J3	*PAT/J3
R8056	8200/J3	*PAT/J3
R8064	*PAT/J3	0/J3
R8065	*PAT/J3	*PAT/J3
R8066	*PAT/J3	*PAT/J3
R8073	6800/J3	*PAT/J3
R8074	*PAT/J3	*PAT/J3
R8091	22K/J3	15K/J3
R8095	330/J3	390/J3
R8097	0/J3	*PAT/J3
R8111	*PAT/J3	4700/J3
R8112	4700/J3	*PAT/J3
R8136	22K/J3	15K/J3
R8137	390/J3	680/J3
R8139	*PAT/J3	*PAT/J3
R8140	*PAT/J3	*PAT/J3
R8147	0/J3	*PAT/J3
R8151	*PAT/J3	*PAT/J3
R8152	*PAT/J3	*PAT/J3
R8153	*PAT/J3	*PAT/J3
R8154	*PAT/J3	*PAT/J3
R8307	680/J3	1200/J3
R8308	1000/J3	1500/J3
R8309	2200/J3	680/J3
R8310	560/J3	1000/J3
R8314	*PAT/J3	1000/J3
R8315	*PAT/J3	2200/J3
R8316	0/J3	*PAT/J3
R8317	*PAT/J3	470/J3
R8401	560/J3	270/J3
R8402	560/J3	1200/J3
R8403	27K/J3	10K/J3
R8404	18K/J3	10K/J3
VR8001	*PAT/VR5	50K/VR5
VR8005	*PAT/VR5	*PAT/VR5
X8001	VSX0375	VSX0419

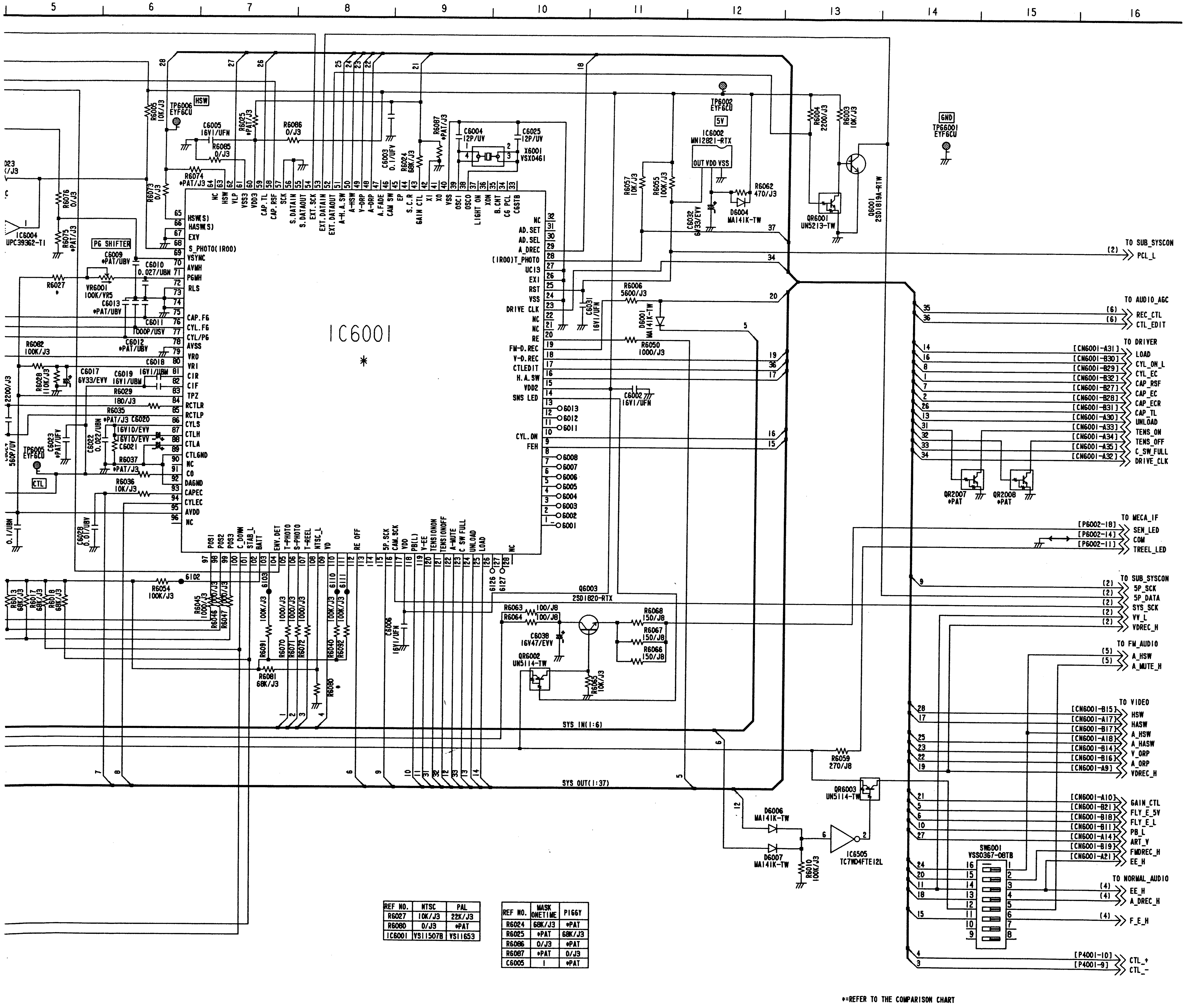
SYSCON SERVO SCHEMATIC DIAGRAM 1／8（E13:Page CBA-13）


FROM MECA_I/F
S_PHOTO [P6002-7]
FROM VIDEO
VENV_DET [CN6001-B9]
FROM SUB_SYSCON
SYS_SUB_SCK (3)
EVEN_FRAME (2)
MUTE_H (2)
FM_ON_H (2)
VD (2)
FROM POWER
DIG_+5V [CN6001-A36, B36]
UNREG [CN6001-A1]
FROM DRIVER
CAP_FG [CN6001-B33] R6033 2200/J3
CYL_FG [CN6001-B34] R6032 0/J3
CYL_PG [CN6001-B35] R6031 0/J3
FROM AUDIO_AGC
PB_CTL (6)
FROM MECA_I/F
POS1 [P6002-15]
POS2 [P6002-13]
POS3 [P6002-16]
TREEL [P6002-12]
STAB_L [P6003-15]
C_DOWN [P6002-6]
T_PHOTO [P6002-24]
IC6001
IC6004 UPC39362-T1
IC6002 MN12821-RTX
X6001 VSX0461
Q6003 2SD1820-RTX
QR6002 UN5114-TW
QR6001 UN5213-TW
D6003 MA141K-TW
D6004 MA141K-TW
D6001 MA141K-TW
PG SHIFTER
HSW
CTL
5V
D5VC
SYS IN(1:6)
SYS OUT(1:37)

REF NO.	NTSC	PAL
R6027	10K/J3	22K/J3
R6080	0/J3	*PAT
IC6001	VS11507B	VS11653

REF NO.	MASK ONETIME	PIGGY
R6024	68K/J3	*PAT
R6025	*PAT	68K/J3
R6086	0/J3	*PAT
R6087	*PAT	0/J3
C6005	1	*PAT

M 1／8（E13:Page CBA-13）

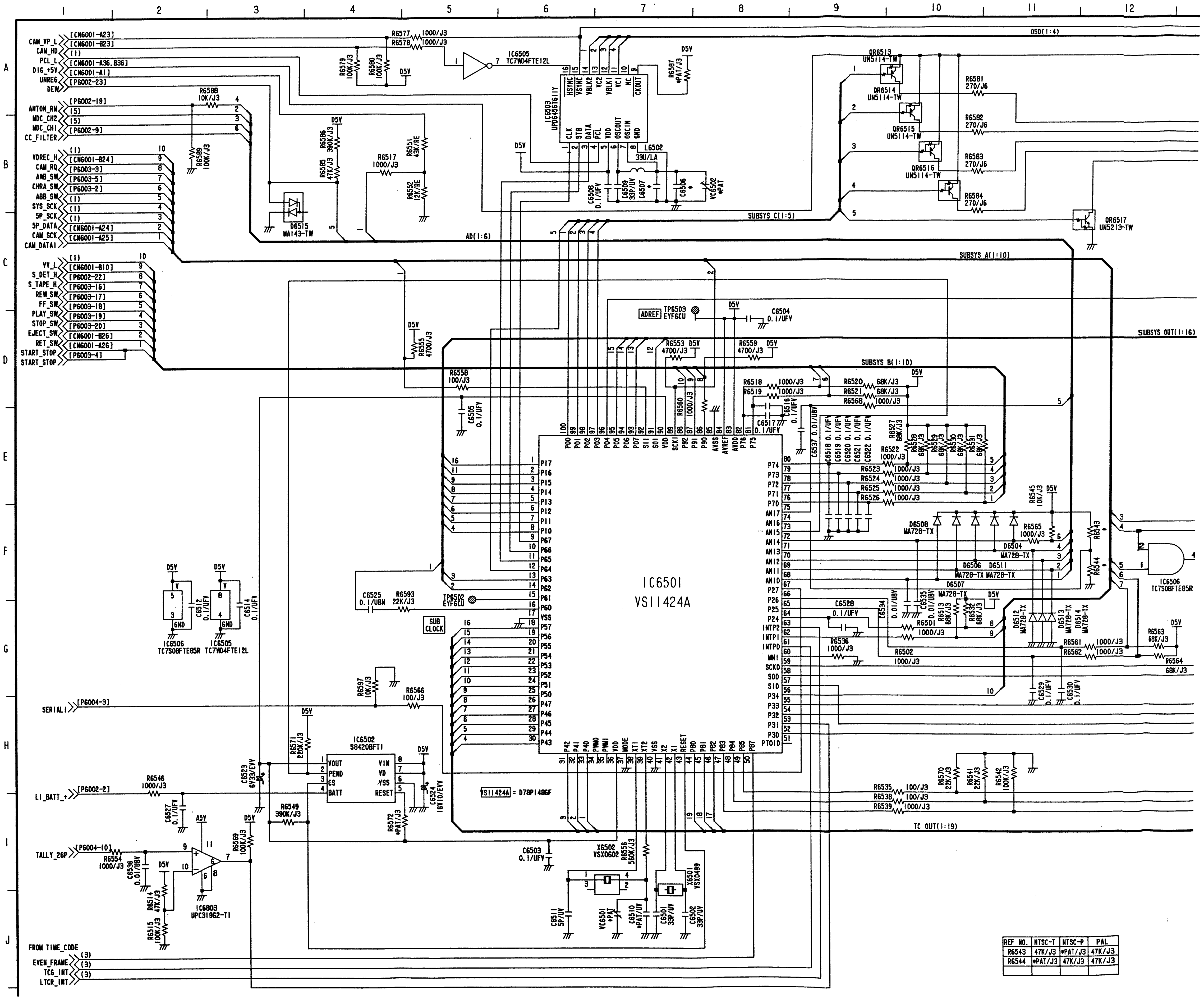

5
6
7
8
9
10
11
12
13
14
15
16
IC6001
IC6002 MN12821-RTX
5V
TP6002 EYF6CU
TP6001 EYF6CU
GND
TP6006 EYF6CU
HSW
TP6005 EYF6CU
CTL
PG SHIFTER
IC6004 UPC39362-TI
X6001 VSX0461
Q6001 2SD1819A-RTW
QR6001 UN5213-TW
D6004 MA141K-TW
D6001 MA141K-TW
Q6003 2SD1820-RTX
QR6002 UN5114-TW
QR6003 UN5114-TW
D6006 MA141K-TW
D6007 MA141K-TW
IC6505 TC7WU4FTE12L
QR2007 *PAT
QR2008 *PAT
SW6001 VSS0367-08TB
SYS IN(1:6)
SYS OUT(1:37)
TO SUB_SYSCON
(2) PCL_L
TO AUDIO_AGC
(6) REC_CTL
(6) CTL_EDIT
TO DRIVER
[CN6001-A31] LOAD
[CN6001-B30] CYL_ON_L
[CN6001-B29] CYL_EC
[CN6001-B32] CAP_RSF
[CN6001-B27] CAP_EC
[CN6001-B28] CAP_ECR
[CN6001-B31] CAP_TL
[CN6001-A30] UNLOAD
[CN6001-A33] TENS_ON
[CN6001-A34] TENS_OFF
[CN6001-A35] C_SW_FULL
[CN6001-A32] DRIVE_CLK
TO MECA_IF
[P6002-18] SEN_LED
[P6002-14] COM
[P6002-11] TREEL_LED
TO SUB_SYSCON
(2) 5P_SCK
(2) 5P_DATA
(2) SYS_SCK
(2) VV_L
(2) VDREC_H
TO FM_AUDIO
(5) A_HSW
(5) A_MUTE_H
TO VIDEO
[CN6001-B15] HSW
[CN6001-A17] HASW
[CN6001-B17] A_HSW
[CN6001-A18] A_HASW
[CN6001-B14] V_ORP
[CN6001-B16] A_ORP
[CN6001-A9] VDREC_H
[CN6001-A10] GAIN_CTL
[CN6001-B21] FLY_E_5V
[CN6001-B18] FLY_E_L
[CN6001-B11] PB_L
[CN6001-A14] ART_V
[CN6001-B19] FMDREC_H
[CN6001-A21] EE_H
TO NORMAL_AUDIO
(4) EE_H
(4) A_DREC_H
(4) F_E_H
[P4001-10] CTL_+
[P4001-9] CTL_-

REF NO.	NTSC	PAL
R6027	10K/J3	22K/J3
R6080	0/J3	*PAT
IC6001	VS11507B	VS11653

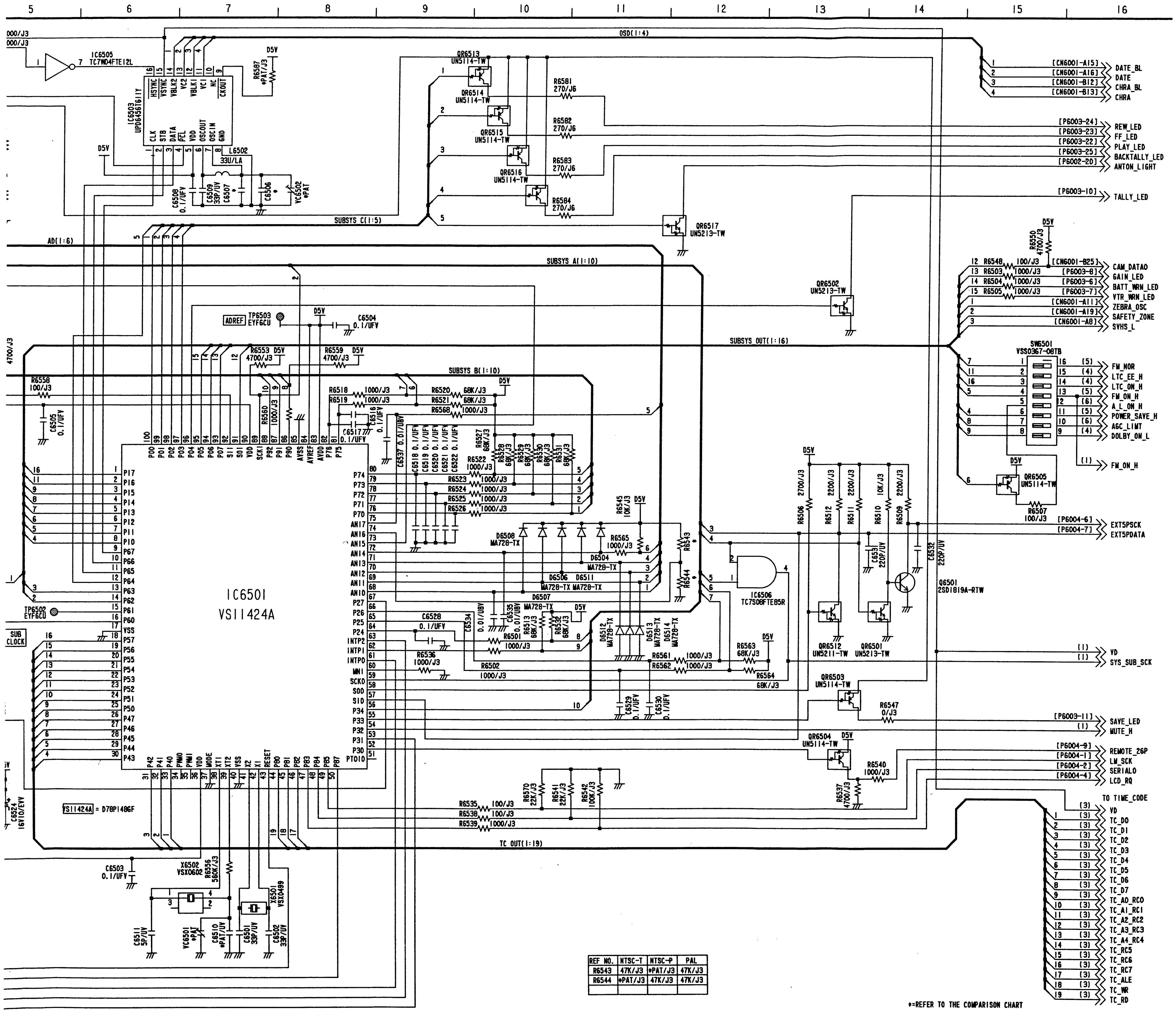
REF NO.	MASK ONETIME	PIGGY
R6024	68K/J3	*PAT
R6025	*PAT	68K/J3
R6086	0/J3	*PAT
R6087	*PAT	0/J3
C6005	I	*PAT

*=REFER TO THE COMPARISON CHART

SUB SYSCON SCHEMATIC DIAGRAM 2／8（E13:Page CBA-14）


1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
J
CAM_VP_L
CAM_HD
PCL_L
DIG_+5V
UNREG
DEW
[CN6001-A23]
[CN6001-B23]
[CN6001-A36,B36]
[CN6001-A1]
[P6002-23]
ANTON_RM
MDC_CH2
MDC_CH1
CC_FILTER
[P6002-19]
[P6002-9]
VDREC_H
CAM_RQ
AWB_SW
CHRA_SW
ABB_SW
SYS_SCK
5P_SCK
5P_DATA
CAM_SCK
CAM_DATA1
[CN6001-B24]
[P6003-3]
[P6003-5]
[P6003-2]
[CN6001-A24]
[CN6001-A25]
VV_L
S_DET_H
S_TAPE_H
REW_SW
FF_SW
PLAY_SW
STOP_SW
EJECT_SW
RET_SW
START_STOP
[CN6001-B10]
[P6002-22]
[P6003-16]
[P6003-17]
[P6003-18]
[P6003-19]
[P6003-20]
[CN6001-B26]
[CN6001-A26]
[P6003-4]
SERIAL1
[P6004-3]
LI_BATT_+
[P6002-2]
TALLY_26P
[P6004-10]
FROM TIME_CODE
EVEN_FRAME
TC6_INT
LTCR_INT
R6577 1000/J3
R6578 1000/J3
R6579 10K/J3
R6590 100K/J3
D5V
IC6505
TC7WD4FTE12L
R6588 10K/J3
R6589 100K/J3
R6586 390K/J3
R6585 47K/J3
R6517 1000/J3
R6551 43K/RE
R6552 12K/RE
D6515
MA143-TW
AD(1:6)
IC6503
UPD6453G1IY
HSYNC
VSYNC
VBLK2
VC2
VBLK1
VC1
NC
CKOUT
CLK
STB
DATA
PCL
VDD
OSCOUT
OSCIN
GND
R6587 *PAT/J3
L6502 33U/LA
C6508 0.1/UFV
C6509 33P/UV
C6507
C6506
VC6502 *PAT
SUBSYS_C(1:5)
OSD(1:4)
QR6513 UN5114-TW
QR6514 UN5114-TW
QR6515 UN5114-TW
QR6516 UN5114-TW
QR6517 UN5213-TW
R6581 270/J6
R6582 270/J6
R6583 270/J6
R6584 270/J6
SUBSYS_A(1:10)
SUBSYS_OUT(1:16)
SUBSYS_B(1:10)
ADREF
TP6503 EYF6CU
C6504 0.1/UFV
R6555 4700/J3
R6553 4700/J3
R6559 4700/J3
R6558 100/J3
C6505 0.1/UFV
R6560 1000/J3
R6518 1000/J3
R6519 1000/J3
R6520 68K/J3
R6521 68K/J3
R6568 1000/J3
C6516 0.1/UFV
C6517 0.1/UFV
C6537 0.01/UBY
C6518 0.1/UFV
C6519 0.1/UFV
C6520 0.1/UFV
C6521 0.1/UFV
C6522 0.1/UFV
R6527 68K/J3
R6528 68K/J3
R6529 68K/J3
R6530 68K/J3
R6531 68K/J3
R6522 1000/J3
R6523 1000/J3
R6524 1000/J3
R6525 1000/J3
R6526 1000/J3
IC6501
VS11424A
P00
P01
P02
P03
P04
P05
P06
P07
SI1
SO1
VDD
SCK1
P92
P91
P90
AVSS
AVREF
AVDD
P81
P76
P75
P17
P16
P15
P14
P13
P12
P11
P10
P67
P66
P65
P64
P63
P62
P61
P60
VSS
P57
P56
P55
P54
P53
P52
P51
P50
P47
P46
P45
P44
P43
P42
P41
P40
PWM0
PWM1
MODE
XT1
XT2
X2
X1
RESET
P80
P82
P83
P84
P85
P87
P74
P73
P72
P71
P70
AN17
AN16
AN15
AN14
AN13
AN12
AN11
AN10
P27
P26
P25
P24
INTP2
INTP1
INTP0
NMI
SCK0
SO0
SI0
P34
P33
P32
P31
P30
PTO10
R6545 10K/J3
D6508 MA728-TX
D6504
D6506
D6511
D6507
MA728-TX
R6565 1000/J3
R6543
R6544
IC6506
TC7S08FTE85R
C6525 0.1/UBN
R6593 22K/J3
TP6502 EYF6CU
SUB CLOCK
C6528 0.1/UFV
C6534
C6535 0.01/UBY
R6513 68K/J3
R6532 68K/J3
R6501 1000/J3
R6536 1000/J3
R6502 1000/J3
D6512 MA728-TX
D6513 MA728-TX
D6514 MA728-TX
R6561 1000/J3
R6562 1000/J3
R6563 68K/J3
R6564 68K/J3
C6529 0.1/UFV
C6530 0.1/UFV
IC6505 TC7WD4FTE12L
C6512 0.1/UFV
C6514 0.1/UFV
GND
R6597 10K/J3
R6566 100/J3
R6571 220K/J3
IC6502
S8420BFT1
VOUT
PEND
CS
BATT
VIN
VD
VSS
RESET
C6523 6V33/EVY
C6524 16V10/EVY
R6546 1000/J3
C6527 0.1/UFV
R6549 390K/J3
R6572 *PAT/J3
A5V
R6569 100K/J3
R6554 1000/J3
C6536 0.01/UBY
R6514 47K/J3
R6515 100K/J3
IC6803
UPC3196Z-T1
VS11424A = D78P148GF
R6535 100/J3
R6538 100/J3
R6539 1000/J3
R6570 22K/J3
R6541 22K/J3
R6542 100K/J3
TC_OUT(1:19)
C6503 0.1/UFV
X6502 VSX0602
R6556 560K/J3
X6501 VSX0499
C6511 5P/UV
VC6501 *PAT
C6510 *PAT/UV
C6501 33P/UV
C6502 33P/UV

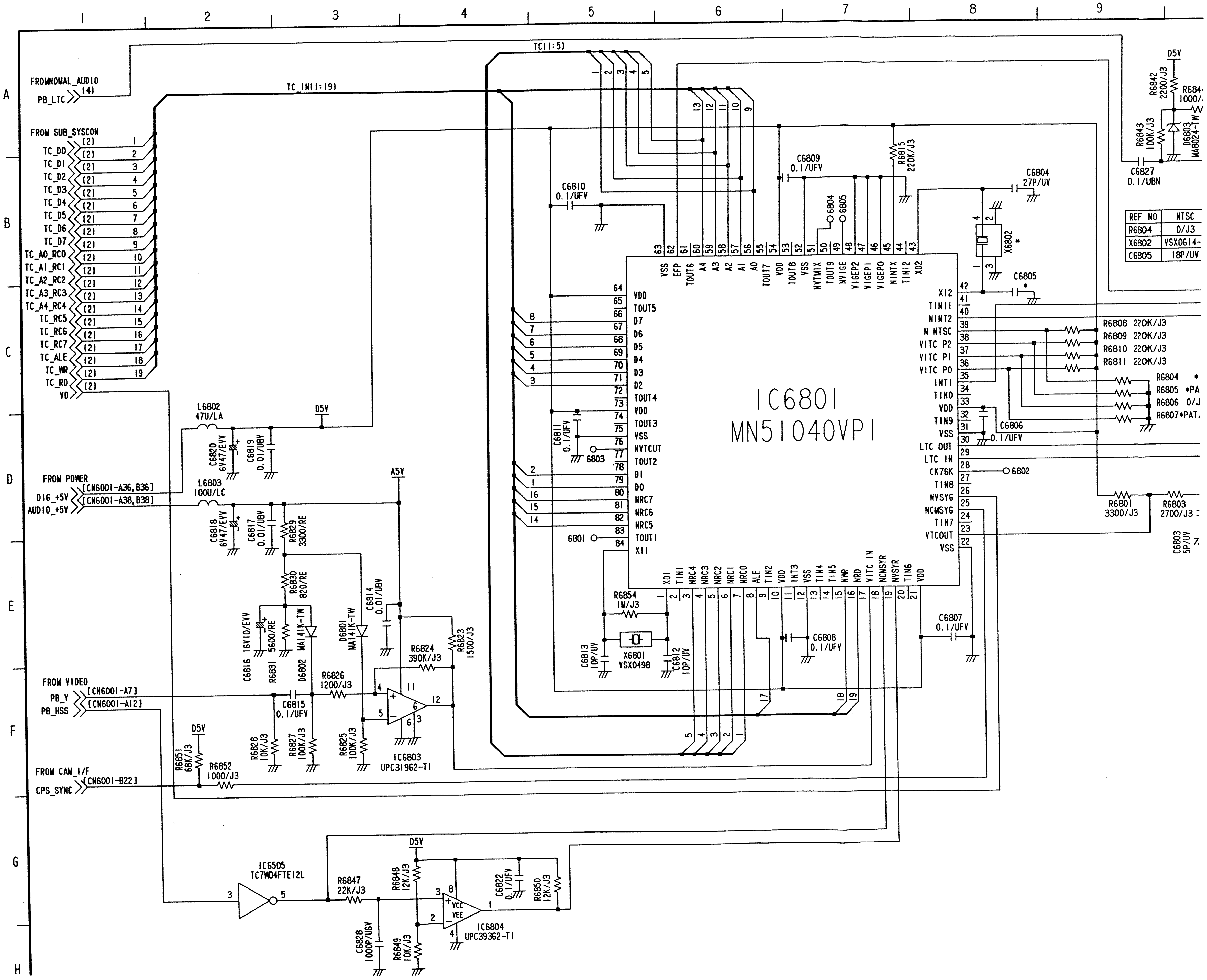
REF NO.	NTSC-T	NTSC-P	PAL
R6543	47K/J3	*PAT/J3	47K/J3
R6544	*PAT/J3	47K/J3	47K/J3


5
6
7
8
9
10
11
12
13
14
15
16
OSD(1:4)
IC6505
TC7W04FTE12L
IC6503
UPD6453G11Y
HSYNC
VSYNC
VBLK2
VC2
VBLK1
VC1
NC
CKOUT
CLK
STB
DATA
PCL
VDD
OSCOUT
OSCIN
GND
L6502
33U/LA
C6508
0.1/UFV
C6509
33P/UV
C6507
C6506
VC6502
*PAT
R6587
*PAT/J3
D5V
QR6513
UN5114-TW
QR6514
UN5114-TW
QR6515
UN5114-TW
QR6516
UN5114-TW
QR6517
UN5213-TW
R6581
270/J6
R6582
270/J6
R6583
270/J6
R6584
270/J6
SUBSYS C(1:5)
AD(1:6)
SUBSYS A(1:10)
SUBSYS B(1:10)
SUBSYS OUT(1:16)
TC OUT(1:19)
[CN6001-A15]
[CN6001-A16]
[CN6001-B12]
[CN6001-B13]
DATE_BL
DATE
CHRA_BL
CHRA
[P6003-24]
[P6003-23]
[P6003-22]
[P6003-25]
[P6002-20]
REW_LED
FF_LED
PLAY_LED
BACKTALLY_LED
ANTON_LIGHT
[P6003-10]
TALLY_LED
R6550
4700/J3
R6548
100/J3
R6503
1000/J3
R6504
1000/J3
R6505
1000/J3
[CN6001-B25]
[P6003-8]
[P6003-6]
[P6003-7]
[CN6001-A11]
[CN6001-A19]
[CN6001-A8]
CAM_DATAO
GAIN_LED
BATT_WRN_LED
VTR_WRN_LED
ZEBRA_OSC
SAFETY_ZONE
SVHS_L
QR6502
UN5213-TW
SW6501
VSS0367-08TB
FM_NOR
LTC_EE_H
LTC_ON_H
FM_ON_H
A_L_ON_H
POWER_SAVE_H
AGC_LIMT
DOLBY_ON_L
FM_ON_H
QR6505
UN5114-TW
R6507
100/J3
[P6004-6]
[P6004-7]
EXT5PSCK
EXT5PDATA
ADREF
TP6503
EYF6CU
C6504
0.1/UFV
R6553
4700/J3
R6559
4700/J3
R6558
100/J3
C6505
0.1/UFV
R6560
R6518
1000/J3
R6519
1000/J3
R6520
68K/J3
R6521
68K/J3
R6568
1000/J3
C6516
C6517
0.1/UFV
C6537
0.01/UBY
C6518
C6519
C6520
C6521
C6522
0.1/UFV
R6527
68K/J3
R6528
R6529
R6530
R6531
68K/J3
R6522
1000/J3
R6523
1000/J3
R6524
1000/J3
R6525
1000/J3
R6526
1000/J3
R6545
10K/J3
R6565
1000/J3
D6508
MA728-TX
D6504
MA728-TX
D6506
D6511
MA728-TX
D6507
MA728-TX
R6543
R6544
IC6506
TC7S08FTE85R
R6506
2700/J3
R6512
2200/J3
R6511
2200/J3
R6510
10K/J3
R6509
2200/J3
C6531
220P/UV
C6532
220P/UV
Q6501
2SD1819A-RTW
QR6512
UN5211-TW
QR6501
UN5213-TW
IC6501
VS11424A
TP6502
EYF6CU
SUB CLOCK
C6528
0.1/UFV
C6534
0.01/UBY
C6535
0.01/UBY
R6501
1000/J3
R6513
68K/J3
R6532
68K/J3
D6512
MA728-TX
D6513
MA728-TX
D6514
MA728-TX
R6536
1000/J3
R6502
1000/J3
R6561
1000/J3
R6562
1000/J3
R6563
68K/J3
R6564
68K/J3
C6529
0.1/UFV
C6530
0.1/UFV
VD
SYS_SUB_SCK
QR6503
UN5114-TW
R6547
0/J3
[P6003-11]
SAVE_LED
MUTE_H
QR6504
UN5114-TW
R6540
1000/J3
R6537
4700/J3
[P6004-9]
[P6004-1]
[P6004-2]
[P6004-4]
REMOTE_26P
LM_SCK
SERIALO
LCD_RQ
R6570
22K/J3
R6541
22K/J3
R6542
100K/J3
R6535
100/J3
R6538
100/J3
R6539
1000/J3
TO TIME_CODE
VD
TC_DO
TC_DI
TC_D2
TC_D3
TC_D4
TC_D5
TC_D6
TC_D7
TC_AD_RCO
TC_A1_RC1
TC_A2_RC2
TC_A3_RC3
TC_A4_RC4
TC_RC5
TC_RC6
TC_RC7
TC_ALE
TC_WR
TC_RD
VS11424A = D78P148GF
C6503
0.1/UFV
X6502
VSX0602
R6556
560K/J3
X6501
VSX0499
C6511
5P/UV
VC6501
*PAT/UV
C6510
*PAT/UV
C6501
33P/UV
C6502
33P/UV
C6524
16V10/EVV

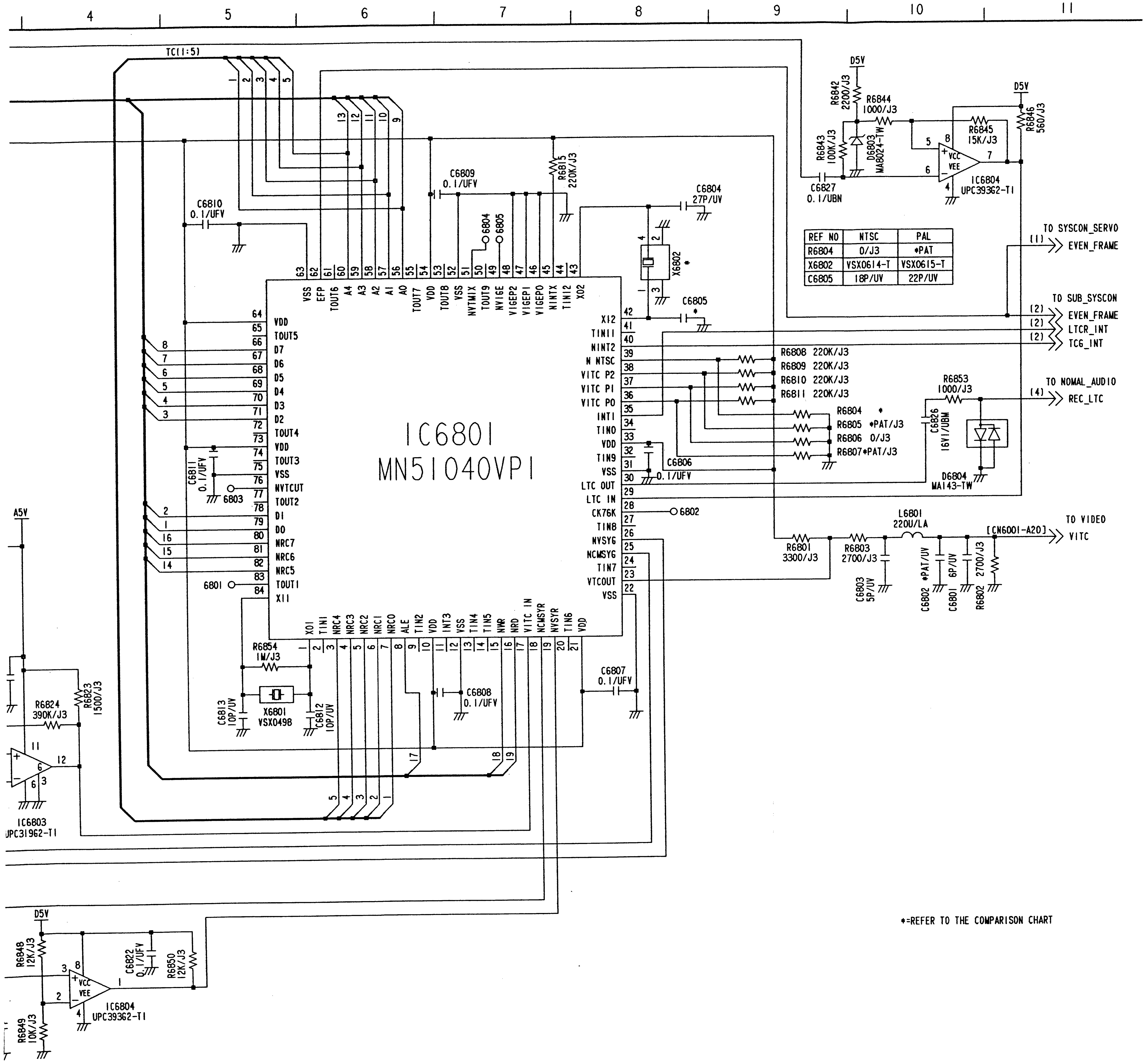
REF NO.	NTSC-T	NTSC-P	PAL
R6543	47K/J3	*PAT/J3	47K/J3
R6544	*PAT/J3	47K/J3	47K/J3

*=REFER TO THE COMPARISON CHART

TIME CODE SCHEMATIC DIAGRAM 3／8（E13:Page CBA-13）


1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
H
FROMNOMAL_AUDIO
PB_LTC (4)
FROM SUB_SYSCON
TC_D0
TC_D1
TC_D2
TC_D3
TC_D4
TC_D5
TC_D6
TC_D7
TC_A0_RC0
TC_A1_RC1
TC_A2_RC2
TC_A3_RC3
TC_A4_RC4
TC_RC5
TC_RC6
TC_RC7
TC_ALE
TC_WR
TC_RD
VD
TC(1:5)
TC_IN(1:19)
FROM POWER
DIG_+5V [CN6001-A36,B36]
AUDIO_+5V [CN6001-A38,B38]
FROM VIDEO
PB_Y [CN6001-A7]
PB_HSS [CN6001-A12]
FROM CAM_I/F
CPS_SYNC [CN6001-B22]
L6802 47U/LA
L6803 100U/LC
D5V
A5V
C6820 6V47/EVV
C6819 0.01/UBV
C6818 6V47/EVV
C6817 0.01/UBV
R6829 3300/RE
R6830 820/RE
C6816 16V10/EVV
R6831 5600/RE
D6802 MA141K-TW
D6801 MA141K-TW
C6814 0.01/UBV
R6824 390K/J3
R6823 1500/J3
R6826 1200/J3
C6815 0.1/UFV
R6828 10K/J3
R6827 100K/J3
R6825 100K/J3
IC6803 UPC31962-T1
R6851 68K/J3
R6852 1000/J3
IC6505 TC7W04FTE12L
R6847 22K/J3
R6848 12K/J3
R6849 10K/J3
C6828 1000P/USV
C6822 0.1/UFV
R6850 12K/J3
IC6804 UPC39362-T1
C6810 0.1/UFV
C6811 0.1/UFV
6803
6801
6802
6804
6805
C6809 0.1/UFV
R6815 220K/J3
C6804 27P/UV
C6805 *
X6802 *
C6806 0.1/UFV
C6807 0.1/UFV
C6808 0.1/UFV
R6854 1M/J3
X6801 VSX0498
C6813 10P/UV
C6812 10P/UV
IC6801
MN51040VP1
VSS EFP TOUT6 A4 A3 A2 A1 A0 TOUT7 VDD TOUT8 VSS NVTMIX TOUT9 NVIGE VIGEP2 VIGEP1 VIGEP0 NINTX TIN12 X02
VDD TOUT5 D7 D6 D5 D4 D3 D2 TOUT4 VDD TOUT3 VSS NVTCUT TOUT2 D1 D0 NRC7 NRC6 NRC5 TOUT1 XI1
XI2 TIN11 NINT2 N NTSC VITC P2 VITC P1 VITC P0 INT1 TIN0 VDD TIN9 VSS LTC OUT LTC IN CK76K TIN8 NVSYG NCMSYG TIN7 VTCOUT VSS
X01 TIN1 NRC4 NRC3 NRC2 NRC1 NRC0 ALE TIN2 VDD INT3 VSS TIN4 TIN5 NWR NRD VITC IN NCMSYR NVSYR TIN6 VDD
D5V
R6842 2200/J3
R6843 100K/J3
D6803 MA8024-TW
C6827 0.1/UBN
R6808 220K/J3
R6809 220K/J3
R6810 220K/J3
R6811 220K/J3
R6804 *
R6805 *PA
R6806 0/J
R6807*PAT
R6801 3300/J3
R6803 2700/J3
C6803 5P/UV
REF NO | NTSC
R6804 | 0/J3
X6802 | VSX0614-
C6805 | 18P/UV

/8 (E13:Page CBA-13)

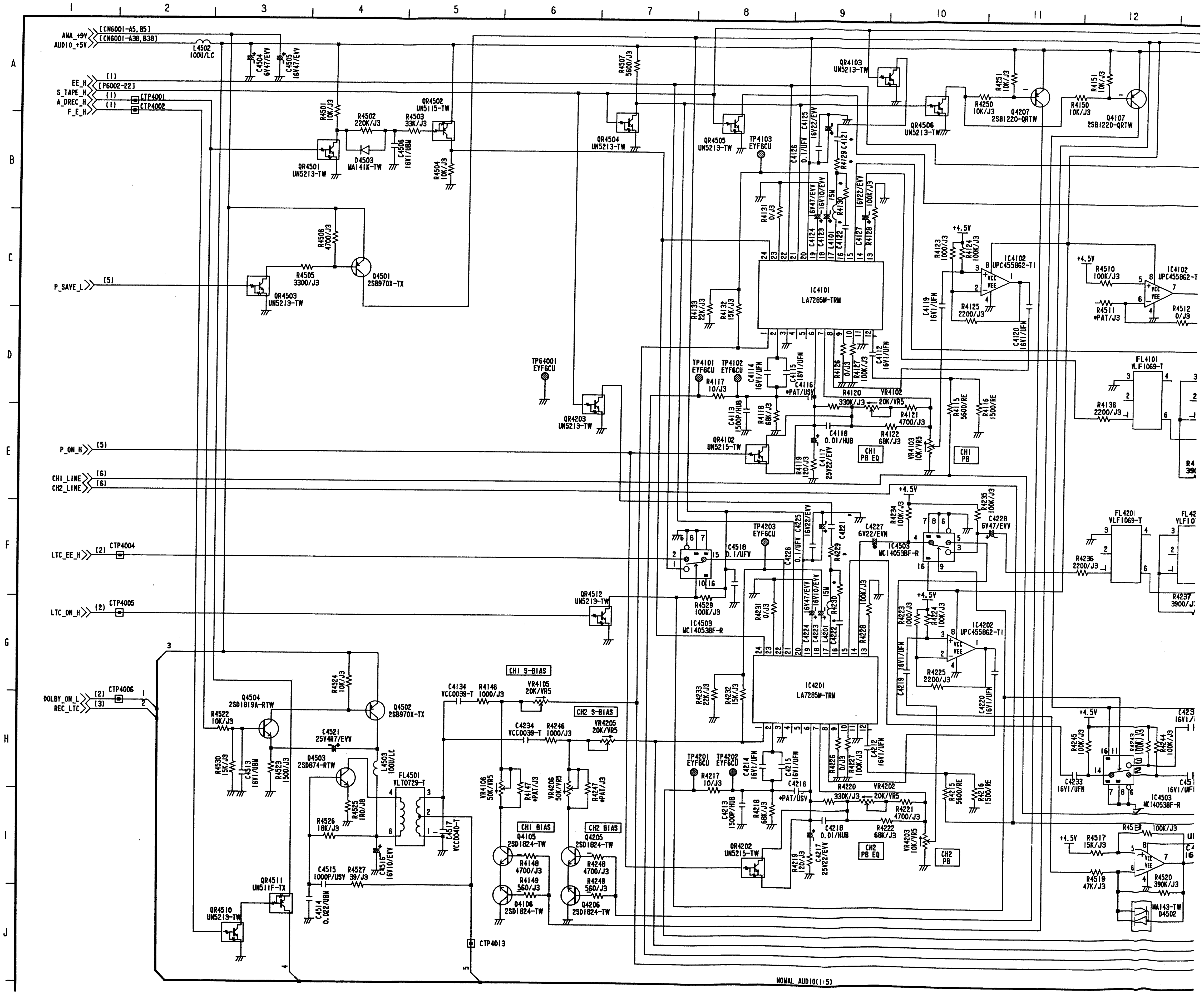


4
5
6
7
8
9
10
11
TC(1:5)
IC6801
MN51040VPI
D5V
R6842 2200/J3
R6844 1000/J3
R6843 100K/J3
D6803 MA8024-TW
R6845 15K/J3
R6846 560/J3
C6827 0.1/UBN
IC6804 UPC39362-T1
C6809 0.1/UFV
R6815 220K/J3
C6810 0.1/UFV
C6804 27P/UV
X6802 *
C6805 *
6804
6805
TO SYSCON_SERVO
(1) EVEN_FRAME
TO SUB_SYSCON
(2) EVEN_FRAME
(2) LTCR_INT
(2) TCG_INT
R6808 220K/J3
R6809 220K/J3
R6810 220K/J3
R6811 220K/J3
R6804 *
R6805 *PAT/J3
R6806 0/J3
R6807 *PAT/J3
R6853 1000/J3
TO NOMAL_AUDIO
(4) REC_LTC
C6826 16V1/UBM
D6804 MA143-TW
C6806 0.1/UFV
6802
6803
6801
C6811 0.1/UFV
L6801 220U/LA
R6801 3300/J3
R6803 2700/J3
[CN6001-A20]
TO VIDEO
VITC
C6803 5P/UV
C6802 *PAT/UV
C6801 6P/UV
R6802 2700/J3
VSS EFP TOUT6 A4 A3 A2 A1 A0 TOUT7 VDD TOUT8 VSS NVTMIX TOUT9 NVIGE VIGEP2 VIGEP1 VIGEP0 NINTX TINI2 X02
X12 TINI1 NINT2 N NTSC VITC P2 VITC P1 VITC P0 INT1 TIN0 VDD TIN9 VSS LTC OUT LTC IN CK76K TIN8 NVSYG NCMSYG TIN7 VTCOUT VSS
VDD TOUT5 D7 D6 D5 D4 D3 D2 TOUT4 VDD TOUT3 VSS NVTCUT TOUT2 D1 D0 NRC7 NRC6 NRC5 TOUT1 X11
X01 TIN1 NRC4 NRC3 NRC2 NRC1 NRC0 ALE TIN2 VDD INT3 VSS TIN4 TIN5 NWR NRD VITC IN NCMSYR NVSYR TIN6 VDD
R6854 1M/J3
X6801 VSX0498
C6813 10P/UV
C6812 10P/UV
C6808 0.1/UFV
C6807 0.1/UFV
A5V
R6824 390K/J3
R6823 1500/J3
IC6803 UPC31962-T1
R6848 12K/J3
R6849 10K/J3
C6822 0.1/UFV
R6850 12K/J3
IC6804 UPC39362-T1
VCC
VEE

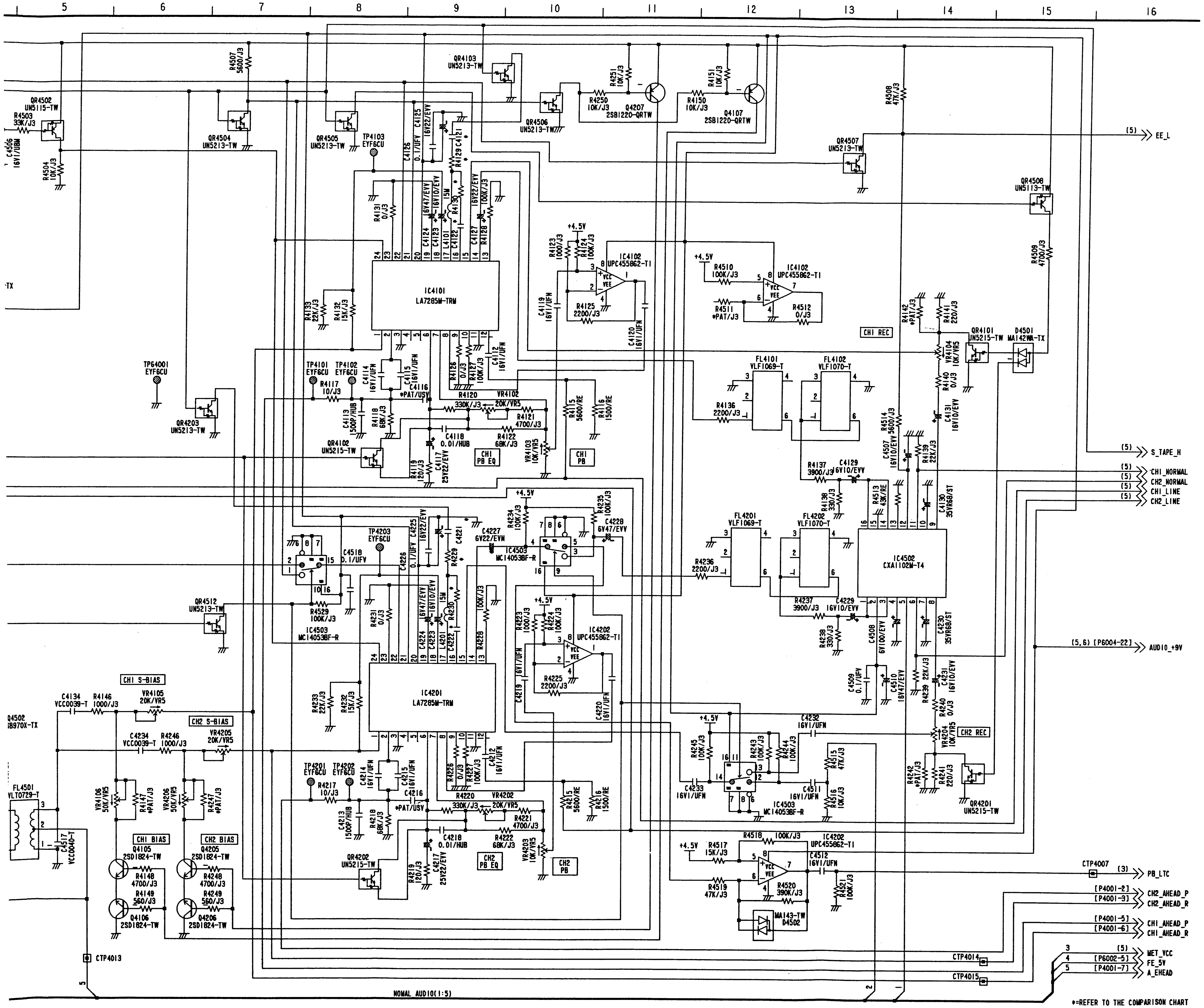
REF NO	NTSC	PAL
R6804	0/J3	*PAT
X6802	VSX0614-T	VSX0615-T
C6805	18P/UV	22P/UV

*=REFER TO THE COMPARISON CHART

NORMAL AUDIO SCHEMATIC DIAGRAM 4／8（E13:Page CBA-13）

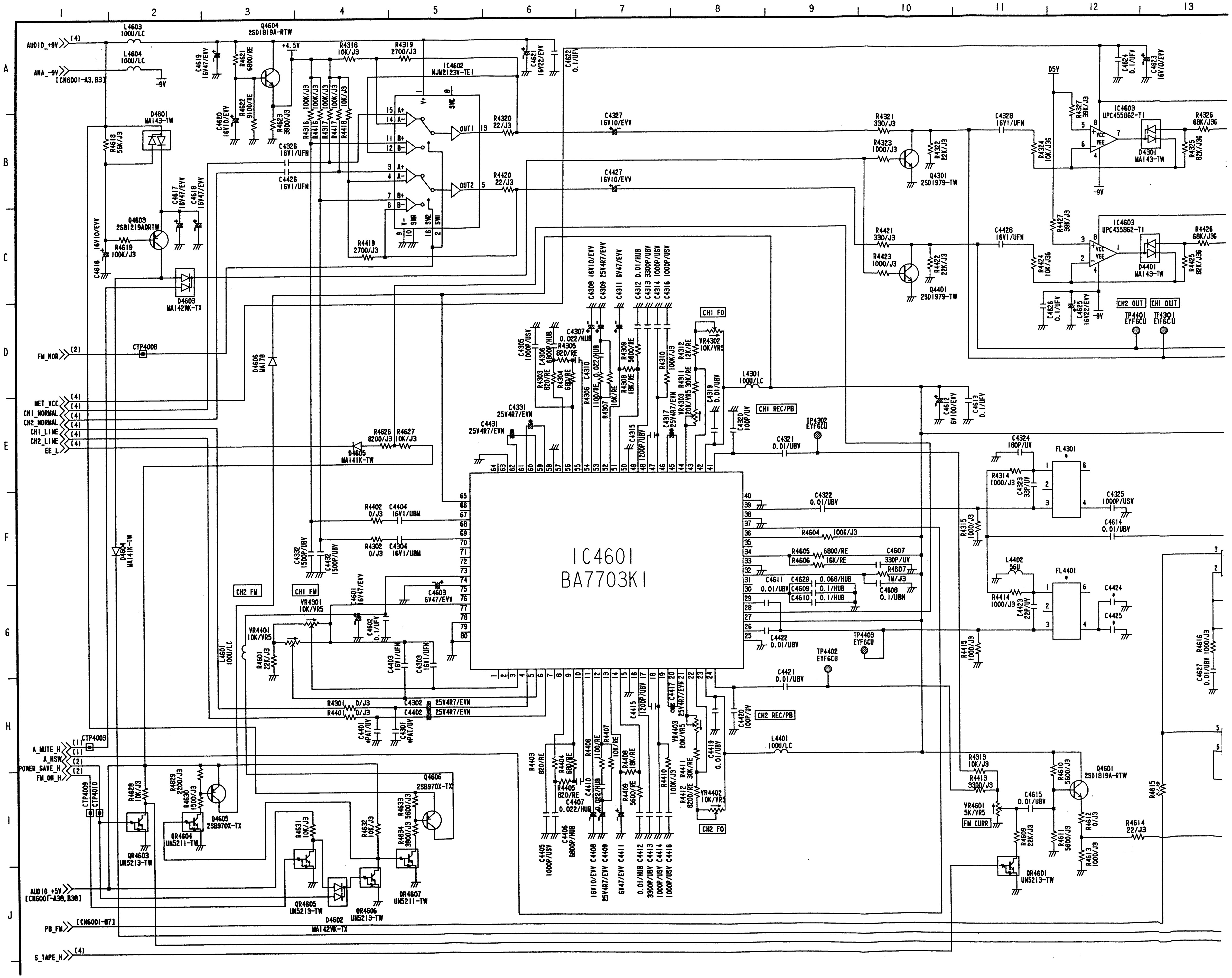

1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
J
ANA_+9V
AUDIO_+5V
[CN6001-A5,B5]
[CN6001-A38,B38]
L4502 100U/LC
C4504 6V47/EVV
C4505 16V47/EVV
EE_H
S_TAPE_H
A_DREC_H
F_E_H
[P6002-22]
CTP4001
CTP4002
R4501 10K/J3
R4502 220K/J3
R4503 33K/J3
QR4502 UN5115-TW
QR4501 UN5213-TW
D4503 MA141K-TW
C4506 16V1/UBM
R4504 10K/J3
R4507 5600/J3
QR4504 UN5213-TW
QR4505 UN5213-TW
TP4103 EYF6CU
QR4103 UN5213-TW
QR4506 UN5213-TW
R4250 10K/J3
R4251 10K/J3
Q4207 2SB1220-QRTW
R4150 10K/J3
R4151 10K/J3
Q4107 2SB1220-QRTW
R4506 4700/J3
R4505 3300/J3
Q4501 2SB970X-TX
QR4503 UN5213-TW
P_SAVE_L
IC4101 LA7285M-TRM
R4131 0/J3
R4133 22K/J3
R4132 15K/J3
C4126 0.1/UFV
C4125 16V22/EVV
C4124 6V47/EVV
C4123 16V10/EVV
L4101 15M
C4122
C4127 16V22/EVV
R4128 100K/J3
R4129
R4130
C4121
IC4102 UPC4558G2-T1
R4123 1000/J3
R4124 100K/J3
R4125 2200/J3
C4119 16V1/UFN
C4120 16V1/UFN
+4.5V
R4510 100K/J3
R4511 ✽PAT/J3
R4512 0/J3
TP6400I EYF6CU
TP4101 EYF6CU
TP4102 EYF6CU
R4117 10/J3
C4114 16V1/UFN
C4115 16V1/UFN
C4116 ✽PAT/USV
R4126 0/J3
R4127 100K/J3
C4112 16V1/UFN
R4120 330K/J3
VR4102 20K/VR5
R4121 4700/J3
R4122 68K/J3
C4113 1500P/HUB
R4118 68K/J3
C4118 0.01/HUB
QR4102 UN5215-TW
R4119 120/J3
C4117 25V22/EVV
VR4103 10K/VR5
CH1 PB EQ
CH1 PB
R4115 5600/RE
R4116 1500/RE
FL4101 VLF1069-T
R4136 2200/J3
QR4203 UN5213-TW
P_ON_H
CH1_LINE
CH2_LINE
LTC_EE_H
CTP4004
LTC_ON_H
CTP4005
QR4512 UN5213-TW
IC4503 MC14053BF-R
C4518 0.1/UFV
R4529 100K/J3
TP4203 EYF6CU
C4226 0.1/UFV
C4225 16V22/EVV
C4227 6V22/EVN
R4234 100K/J3
R4235 100K/J3
C4228 6V47/EVV
FL4201 VLF1069-T
R4236 2200/J3
R4237 3900/J3
IC4201 LA7285M-TRM
R4231 0/J3
R4233 22K/J3
R4232 15K/J3
C4224 16V47/EVV
C4223 16V10/EVV
L4201 15M
C4222
R4228 100K/J3
R4230
R4229
C4221
IC4202 UPC4558G2-T1
R4223 1000/J3
R4224 100K/J3
R4225 2200/J3
C4219 16V1/UFN
C4220 16V1/UFN
DOLBY_ON_L
REC_LTC
CTP4006
Q4504 2SD1819A-RTW
R4522 10K/J3
R4524 10K/J3
Q4502 2SB970X-TX
C4521 25V4R7/EVV
Q4503 2SD874-RTW
L4503 100U/LC
R4530 15K/J3
C4513 16V1/UBM
R4523 1500/J3
R4526 18K/J3
R4525 1R0/J8
FL4501 VLT0729-T
C4517 VCC0040-T
C4516 16V10/EVV
C4515 1000P/USV
R4527 39/J3
C4514 0.022/UBM
QR4511 UN511F-TX
QR4510 UN5213-TW
CTP4013
C4134 VCC0039-T
R4146 1000/J3
VR4105 20K/VR5
CH1 S-BIAS
CH2 S-BIAS
C4234 VCC0039-T
R4246 1000/J3
VR4205 20K/VR5
VR4106 50K/VR5
R4147 ✽PAT/J3
VR4206 50K/VR5
R4247 ✽PAT/J3
CH1 BIAS
CH2 BIAS
Q4105 2SD1824-TW
R4148 4700/J3
R4149 560/J3
Q4106 2SD1824-TW
Q4205 2SD1824-TW
R4248 4700/J3
R4249 560/J3
Q4206 2SD1824-TW
TP4201 EYF6CU
TP4202 EYF6CU
R4217 10/J3
C4214 16V1/UFN
C4215 16V1/UFN
C4216 ✽PAT/USV
R4226 0/J3
R4227 100K/J3
C4212 16V1/UFN
R4220 330K/J3
VR4202 20K/VR5
R4221 4700/J3
R4222 68K/J3
C4213 1500P/HUB
R4218 68K/J3
C4218 0.01/HUB
QR4202 UN5215-TW
R4219 120/J3
C4217 25V22/EVV
VR4203 10K/VR5
CH2 PB EQ
CH2 PB
R4215 5600/RE
R4216 1500/RE
R4245 100K/J3
R4243 100K/J3
R4244 100K/J3
C4233 16V1/UFN
IC4503 MC14053BF-R
R4513 100K/J3
R4517 15K/J3
R4519 47K/J3
R4520 390K/J3
D4502 MA143-TW
NOMAL AUDIO(1:5)

AM 4／8（E13:Page CBA-13）

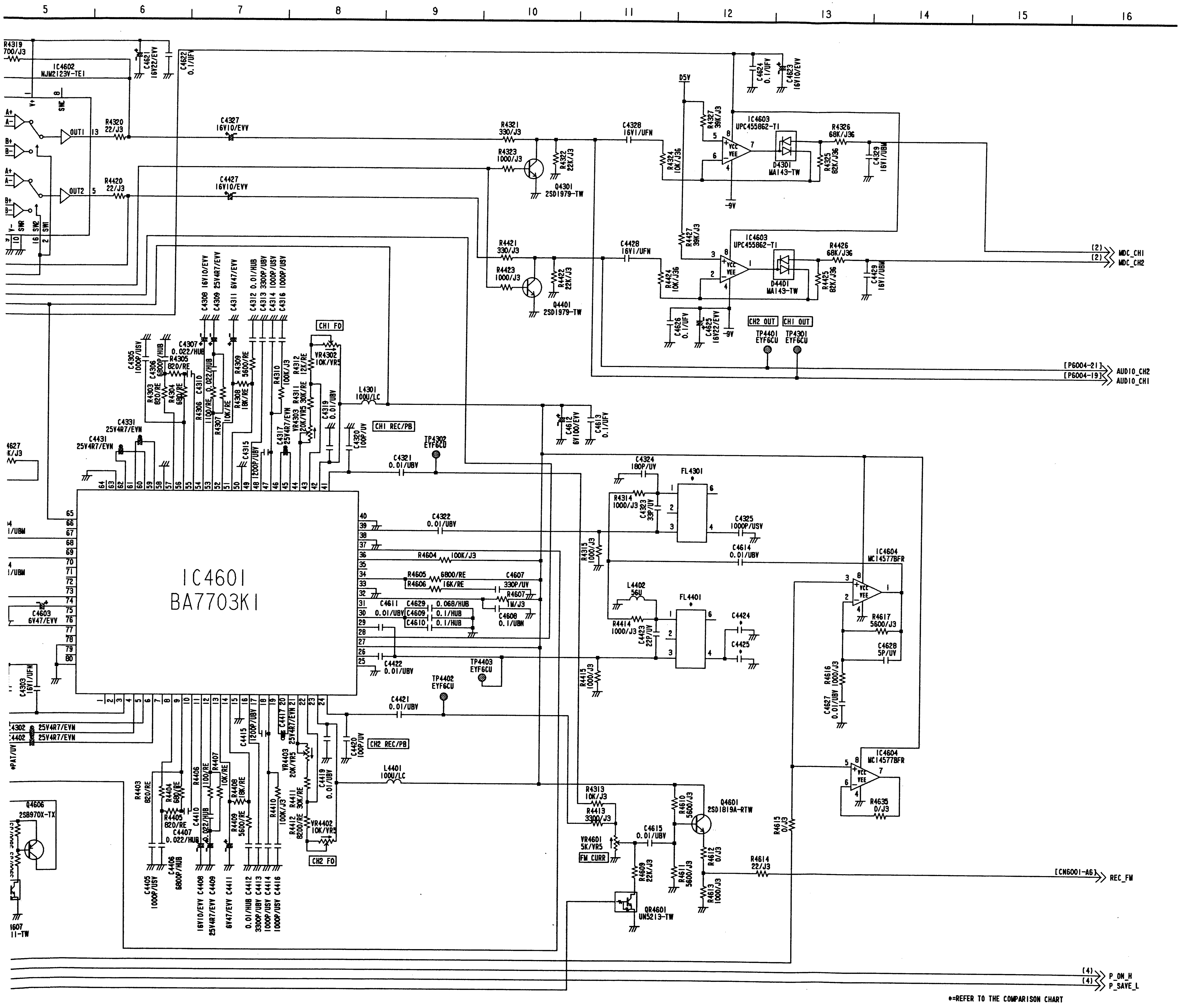

5
6
7
8
9
10
11
12
13
14
15
16
QR4502 UN5115-TW
R4503 33K/J3
C4506 16V1/UBM
R4504 10K/J3
R4507 5600/J3
QR4504 UN5213-TW
QR4505 UN5213-TW
TP4103 EYF6CU
QR4103 UN5213-TW
QR4506 UN5213-TW
R4250 10K/J3
R4251 10K/J3
Q4207 2SB1220-QRTW
R4150 10K/J3
R4151 10K/J3
Q4107 2SB1220-QRTW
R4508 47K/J3
QR4507 UN5213-TW
EE_L
QR4508 UN5113-TW
R4509 4700/J3
IC4101 LA7285M-TRM
R4131 0/J3
R4133 22K/J3
R4132 15K/J3
C4126 0.1/UFV
C4125 16V22/EVV
C4121
R4129
C4124 16V47/EVV
C4123 16V10/EVV
L4101 15M
R4130
C4122
C4127 16V22/EVV
R4128 100K/J3
+4.5V
R4123 1000/J3
R4124 100K/J3
IC4102 UPC4558G2-T1
C4119 16V1/UFN
R4125 2200/J3
C4120 16V1/UFN
R4510 100K/J3
IC4102 UPC4558G2-T1
R4511 *PAT/J3
R4512 0/J3
CH1 REC
R4142 *PAT/J3
R4141 220/J3
QR4101 UN5215-TW
D4501 MA142WA-TX
VR4104 10K/VR5
R4140 0/J3
C4131 16V10/EVV
TP64001 EYF6CU
QR4203 UN5213-TW
TP4101 EYF6CU
TP4102 EYF6CU
R4117 10/J3
C4114 16V1/UFN
C4115 16V1/UFN
C4116 *PAT/USY
C4113 1500P/HUB
R4118 68K/J3
R4126 0/J3
R4127 100K/J3
C4112 16V1/UFN
R4120 330K/J3
VR4102 20K/VR5
R4121 4700/J3
R4115 5600/RE
R4116 1500/RE
C4118 0.01/HUB
R4122 68K/J3
QR4102 UN5215-TW
R4119 120/J3
C4117 25V22/EVV
CH1 PB EQ
VR4103 10K/VR5
CH1 PB
FL4101 VLF1069-T
FL4102 VLF1070-T
R4136 2200/J3
R4137 3900/J3
C4129 6V10/EVV
R4514 5600/J3
C4507 16V10/EVV
R4139 22K/J3
R4138 330/J3
R4513 43K/RE
C4130 35VR68/ST
S_TAPE_H
CH1_NORMAL
CH2_NORMAL
CH1_LINE
CH2_LINE
+4.5V
R4234 100K/J3
R4235 100K/J3
C4228 6V47/EVV
C4227 6V22/EVN
IC4503 MC14053BF-R
C4225 16V22/EVV
C4221
R4229
TP4203 EYF6CU
C4518 0.1/UFV
C4226 0.1/UFV
FL4201 VLF1069-T
FL4202 VLF1070-T
R4236 2200/J3
IC4502 CXA1102M-T4
QR4512 UN5213-TW
R4529 100K/J3
IC4503 MC14053BF-R
R4231 0/J3
C4224 16V47/EVV
C4223 16V10/EVV
L4201 15M
R4230
C4222
R4228 100K/J3
R4223 1000/J3
R4224 100K/J3
IC4202 UPC4558G2-T1
R4237 3900/J3
C4229 16V10/EVV
R4238 330/J3
C4508 6V100/EVV
C4230 35VR68/ST
AUDIO_+9V
IC4201 LA7285M-TRM
R4233 22K/J3
R4232 15K/J3
C4219 16V1/UFN
R4225 2200/J3
C4220 16V1/UFN
C4509 0.1/UFV
C4510 16V47/EVV
R4239 22K/J3
C4231 16V10/EVV
R4240 0/J3
VR4204 10K/VR5
CH2 REC
CH1 S-BIAS
C4134 VCC0039-T
R4146 1000/J3
VR4105 20K/VR5
CH2 S-BIAS
C4234 VCC0039-T
R4246 1000/J3
VR4205 20K/VR5
Q4502 2SB970X-TX
FL4501 VLT0729-T
C4517 VCC0040-T
VR4106 50K/VR5
R4147 *PAT/J3
VR4206 50K/VR5
R4247 *PAT/J3
CH1 BIAS
Q4105 2SD1824-TW
R4148 4700/J3
R4149 560/J3
Q4106 2SD1824-TW
CH2 BIAS
Q4205 2SD1824-TW
R4248 4700/J3
R4249 560/J3
Q4206 2SD1824-TW
CTP4013
TP4201 EYF6CU
TP4202 EYF6CU
R4217 10/J3
C4214 16V1/UFN
C4215 16V1/UFN
C4216 *PAT/USY
C4213 1500P/HUB
R4218 68K/J3
R4226 0/J3
R4227 100K/J3
C4212 16V1/UFN
R4220 330K/J3
VR4202 20K/VR5
R4221 4700/J3
R4215 5600/RE
R4216 1500/RE
C4218 0.01/HUB
R4222 68K/J3
QR4202 UN5215-TW
R4219 120/J3
C4217 25V22/EVV
CH2 PB EQ
VR4203 10K/VR5
CH2 PB
+4.5V
R4245 100K/J3
R4243 100K/J3
R4244 100K/J3
C4232 16V1/UFN
R4515 47K/J3
C4233 16V1/UFN
IC4503 MC14053BF-R
C4511 16V1/UFN
R4516 10K/J3
R4242 *PAT/J3
R4241 220/J3
QR4201 UN5215-TW
R4518 100K/J3
IC4202 UPC4558G2-T1
+4.5V
R4517 15K/J3
C4512 16V1/UFN
R4521 100K/J3
R4519 47K/J3
R4520 390K/J3
MA143-TW D4502
CTP4007
(3)
PB_LTC
[P4001-2] CH2_AHEAD_P
[P4001-3] CH2_AHEAD_R
[P4001-5] CH1_AHEAD_P
[P4001-6] CH1_AHEAD_R
(5) MET_VCC
[P6002-5] FE_5V
[P4001-7] A_EHEAD
CTP4014
CTP4015
(5)
(5,6) [P6004-22]
NOMAL AUDIO(1:5)

*=REFER TO THE COMPARISON CHART

FM AUDIO SCHEMATIC DIAGRAM 5／8（E13:Page CBA-13）

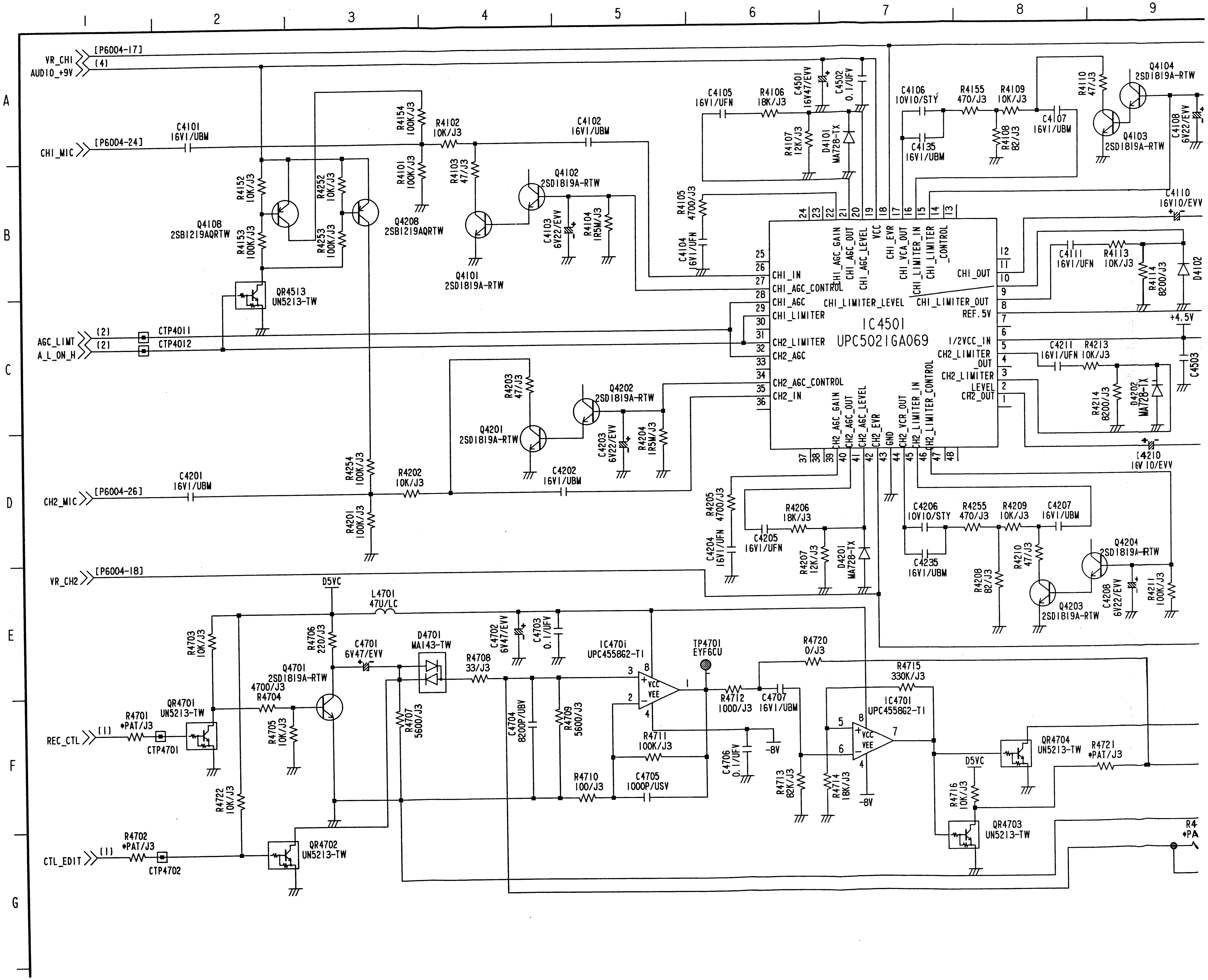

1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I
J
AUDIO_+9V
ANA_-9V
[CN6001-A3,B3]
FM_NOR
MET_VCC
CH1_NORMAL
CH2_NORMAL
CH1_LINE
CH2_LINE
EE_L
A_MUTE_H
A_HSW
POWER_SAVE_H
FM_ON_H
AUDIO_+5V
[CN6001-A38,B38]
PB_FM
[CN6001-B7]
S_TAPE_H
L4603 100U/LC
L4604 100U/LC
Q4604 2SD1819A-RTW
+4.5V
-9V
D4601 MA143-TW
Q4603 2SB1219AQRTW
D4603 MA142WK-TX
D4606 MA178
D4604 MA141K-TW
D4605 MA141K-TW
D4602 MA142WK-TX
IC4602 NJM2123V-TE1
OUT1
OUT2
SWC
SW1
SW2
R4318 10K/J3
R4319 2700/J3
R4320 22/J3
R4420 22/J3
R4419 2700/J3
C4326 16V1/UFN
C4426 16V1/UFN
C4327 16V10/EVV
C4427 16V10/EVV
C4621 16V22/EVV
C4622 0.1/UFV
R4321 330/J3
R4323 1000/J3
Q4301 2SD1979-TW
R4421 330/J3
R4423 1000/J3
Q4401 2SD1979-TW
C4328 16V1/UFN
C4428 16V1/UFN
IC4603 UPC455862-T1
D4301 MA143-TW
D4401 MA143-TW
R4326 68K/J36
R4426 68K/J36
D5V
CH2 OUT
CH1 OUT
TP4401 EYF6CU
TP4301 EYF6CU
CH1 FO
CH2 FO
VR4302 10K/VR5
VR4402 10K/VR5
L4301 100U/LC
L4401 100U/LC
CH1 REC/PB
CH2 REC/PB
TP4302 EYF6CU
TP4402 EYF6CU
TP4403 EYF6CU
C4321 0.01/UBV
C4322 0.01/UBV
C4421 0.01/UBV
C4422 0.01/UBV
IC4601
BA7703K1
R4604 100K/J3
R4605 6800/RE
R4606 16K/RE
C4607 330P/UV
R4607 1M/J3
C4608 0.1/UBN
C4324 180P/UV
FL4301
FL4401
L4402 56U
C4325 1000P/USV
C4614 0.01/UBV
C4424
C4425
R4314 1000/J3
R4414 1000/J3
R4315 1000/J3
R4415 1000/J3
R4313 10K/J3
R4413 3300/J3
VR4601 5K/VR5
FM CURR
C4615 0.01/UBV
Q4601 2SD1819A-RTW
QR4601 UN5213-TW
R4614 22/J3
R4616 1000/J3
C4627 0.01/UBV
CH2 FM
CH1 FM
VR4301 10K/VR5
VR4401 10K/VR5
L4601 100U/LC
R4601 22K/J3
R4402 0/J3
R4302 0/J3
C4404 16V1/UBM
C4304 16V1/UBM
C4332 1500P/UBY
C4432 1500P/UBY
C4603 6V47/EVV
R4301 0/J3
R4401 0/J3
C4302 25V4R7/EVN
C4402 25V4R7/EVN
R4626 8200/J3
R4627 10K/J3
CTP4008
CTP4003
CTP4009
CTP4010
QR4603 UN5213-TW
QR4604 UN5211-TW
Q4605 2SB970X-TX
Q4606 2SB970X-TX
QR4605 UN5213-TW
QR4606 UN5213-TW
QR4607 UN5211-TW
C4331 25V4R7/EVN
C4431 25V4R7/EVN
C4317 25V4R7/EVN
C4417 25V4R7/EVN
VR4303 20K/VR5
VR4403 20K/VR5

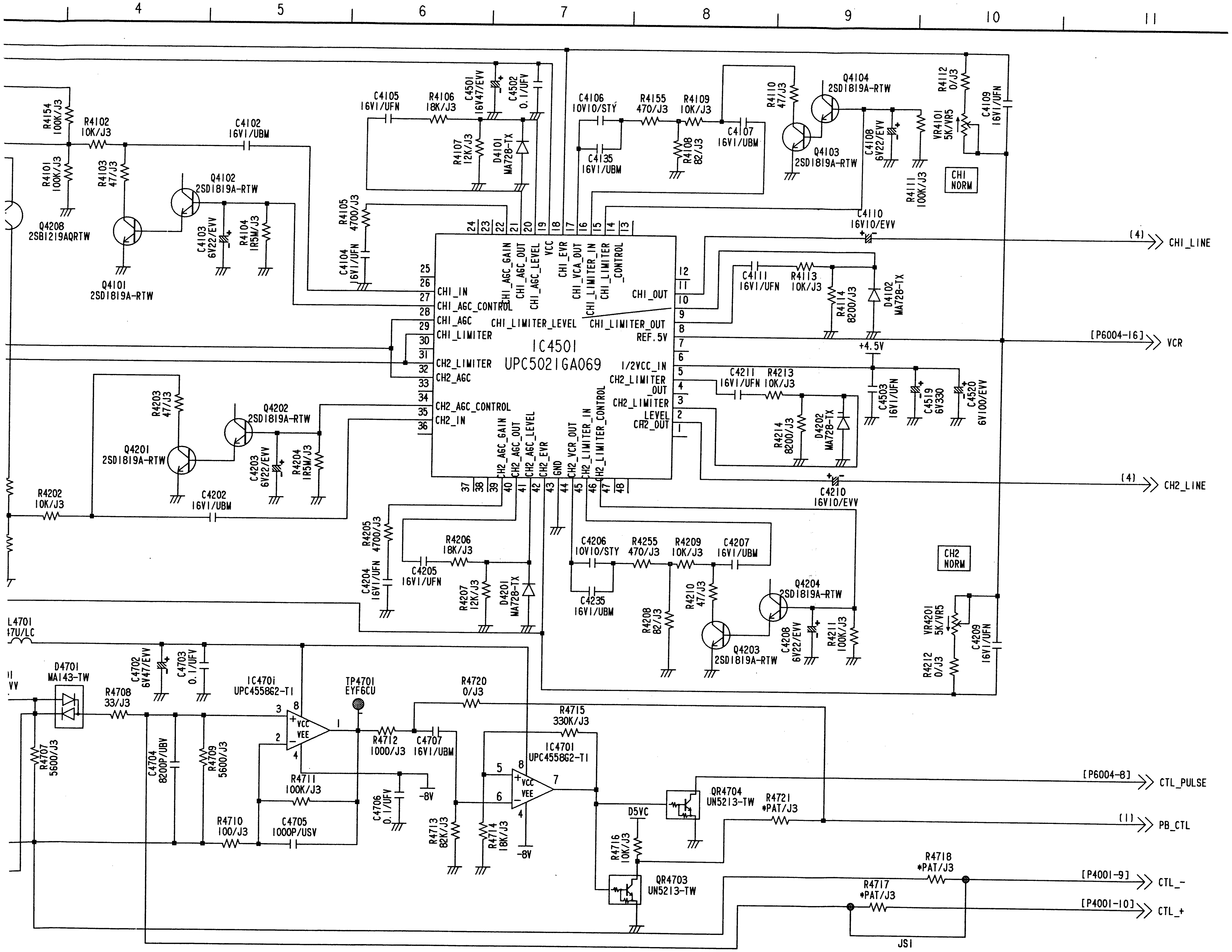
8（E13:Page CBA-13）


5
6
7
8
9
10
11
12
13
14
15
16
IC4601
BA7703KI
IC4602
NJM2123V-TE1
IC4603
UPC4558G2-T1
IC4604
MC14577BFR
Q4301
2SD1979-TW
Q4401
2SD1979-TW
Q4601
2SD1819A-RTW
QR4601
UN5213-TW
Q4606
2SB970X-TX
D4301
MA143-TW
D4401
MA143-TW
FL4301
FL4401
L4301
100U/LC
L4401
100U/LC
L4402
56U
VR4302
10K/VR5
VR4303
20K/VR5
VR4402
10K/VR5
VR4403
20K/VR5
VR4601
5K/VR5
R4320
22/J3
R4420
22/J3
R4321
330/J3
R4323
1000/J3
R4322
22K/J3
R4421
330/J3
R4423
1000/J3
R4422
22K/J3
R4324
10K/J36
R4424
10K/J36
R4325
82K/J36
R4425
82K/J36
R4326
68K/J36
R4426
68K/J36
R4327
39K/J3
R4427
39K/J3
R4314
1000/J3
R4315
1000/J3
R4414
1000/J3
R4415
1000/J3
R4313
10K/J3
R4413
3300/J3
R4604
100K/J3
R4605
6800/RE
R4606
16K/RE
R4607
1M/J3
R4609
22K/J3
R4610
5600/J3
R4611
5600/J3
R4612
0/J3
R4613
1000/J3
R4614
22/J3
R4615
0/J3
R4616
1000/J3
R4617
5600/J3
R4635
0/J3
C4327
16V10/EVV
C4427
16V10/EVV
C4328
16V1/UFN
C4428
16V1/UFN
C4329
16V1/UBM
C4429
16V1/UBM
C4321
0.01/UBV
C4421
0.01/UBV
C4322
0.01/UBV
C4422
0.01/UBV
C4323
33P/UV
C4423
22P/UV
C4324
180P/UV
C4325
1000P/USV
C4614
0.01/UBV
C4615
0.01/UBV
C4607
330P/UV
C4608
0.1/UBN
C4609
0.1/HUB
C4610
0.1/HUB
C4611
0.01/UBV
C4629
0.068/HUB
C4628
5P/UV
C4627
0.01/UBV
C4424
C4425
C4622
0.1/UFV
C4623
16V10/EVV
C4624
0.1/UFV
C4625
16V22/EVV
C4626
0.1/UFV
C4612
6V100/EVV
C4613
0.1/UFV
C4603
6V47/EVV
C4331
25V4R7/EVN
C4431
25V4R7/EVN
C4302
25V4R7/EVN
C4402
25V4R7/EVN
TP4301
EYF6CU
TP4401
EYF6CU
TP4302
EYF6CU
TP4402
EYF6CU
TP4403
EYF6CU
CH1 FO
CH2 FO
CH1 REC/PB
CH2 REC/PB
CH1 OUT
CH2 OUT
FM CURR
D5V
-9V
OUT1
OUT2
(2) MDC_CH1
(2) MDC_CH2
[P6004-21] AUDIO_CH2
[P6004-19] AUDIO_CH1
[CN6001-A6] REC_FM
(4) P_ON_H
(4) P_SAVE_L

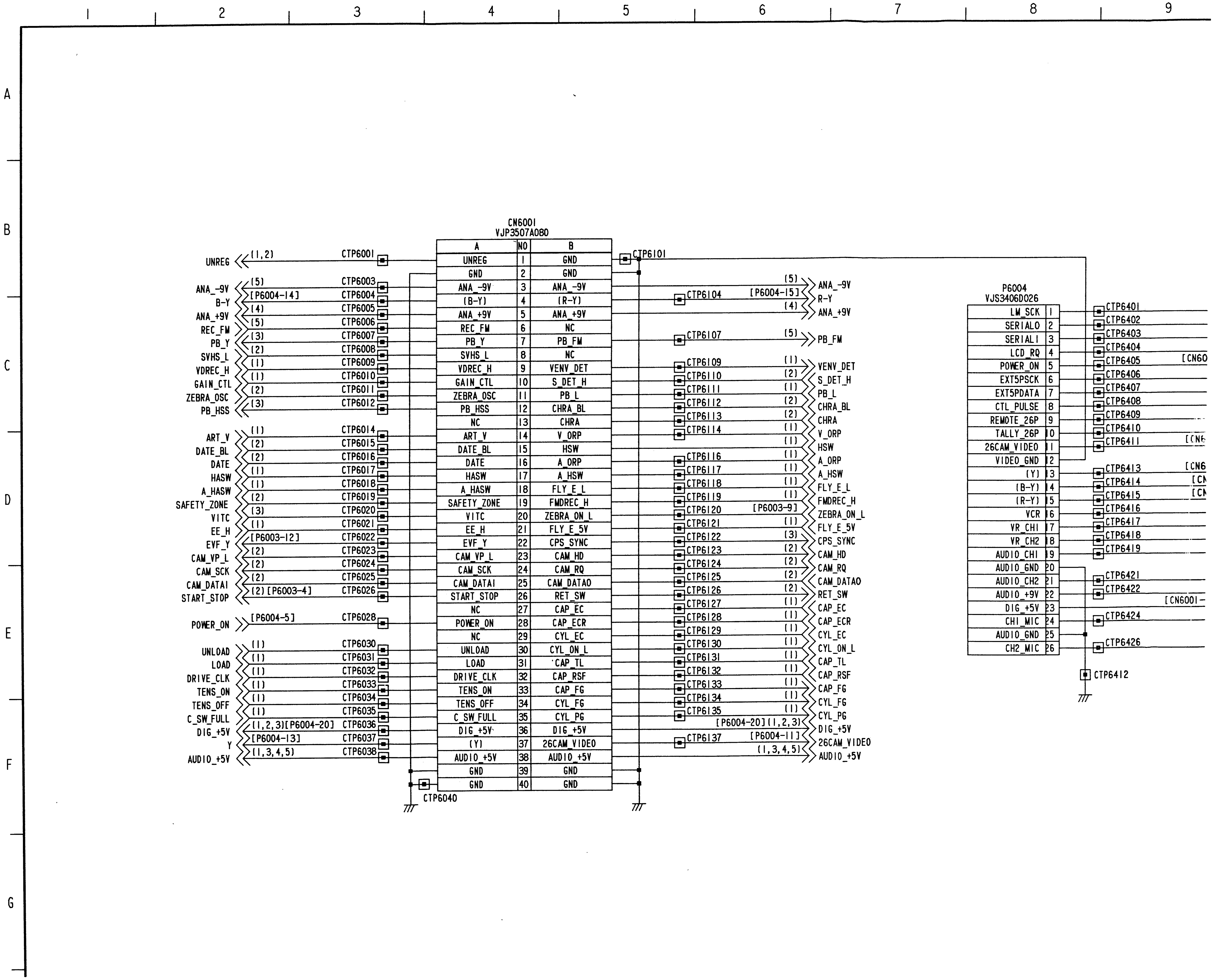
*=REFER TO THE COMPARISON CHART

AUDIO AGC SCHEMATIC DIAGRAM 6／8（E13:Page CBA-13）


1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
VR_CH1
AUDIO_+9V
[P6004-17]
(4)
CH1_MIC
[P6004-24]
C4101
16V1/UBM
R4154
100K/J3
R4102
10K/J3
C4102
16V1/UBM
R4101
100K/J3
R4103
47/J3
R4152
10K/J3
R4252
10K/J3
Q4108
2SB1219AQRTW
Q4208
2SB1219AQRTW
R4153
100K/J3
R4253
100K/J3
Q4102
2SD1819A-RTW
Q4101
2SD1819A-RTW
C4103
6V22/EVV
R4104
1R5M/J3
QR4513
UN5213-TW
AGC_LIMT
A_L_ON_H
(2)
(2)
CTP4011
CTP4012
C4105
16V1/UFN
R4106
18K/J3
C4501
16V47/EVV
C4502
0.1/UFV
R4107
12K/J3
D4101
MA728-TX
R4105
4700/J3
C4104
16V1/UFN
C4106
10V10/STY
R4155
470/J3
R4109
10K/J3
C4107
16V1/UBM
C4135
16V1/UBM
R4108
82/J3
R4110
47/J3
Q4104
2SD1819A-RTW
Q4103
2SD1819A-RTW
C4108
6V22/EVV
C4110
16V10/EVV
C4111
16V1/UFN
R4113
10K/J3
R4114
8200/J3
D4102
+4.5V
C4503
C4211
16V1/UFN
R4213
10K/J3
R4214
8200/J3
D4202
MA728-TX
C4210
16V 10/EVV
IC4501
UPC5021GA069
CH1_AGC_GAIN
CH1_AGC_OUT
CH1_AGC_LEVEL
VCC
CH1_EVR
CH1_VCA_OUT
CH1_LIMITER_IN
CH1_LIMITER_CONTROL
CH1_IN
CH1_AGC_CONTROL
CH1_AGC
CH1_LIMITER_LEVEL
CH1_LIMITER
CH1_OUT
CH1_LIMITER_OUT
REF.5V
CH2_LIMITER
1/2VCC_IN
CH2_AGC
CH2_LIMITER_OUT
CH2_LIMITER_LEVEL
CH2_AGC_CONTROL
CH2_IN
CH2_OUT
CH2_AGC_GAIN
CH2_AGC_OUT
CH2_AGC_LEVEL
CH2_EVR
GND
CH2_VCR_OUT
CH2_LIMITER_IN
CH2_LIMITER_CONTROL
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
R4203
47/J3
Q4202
2SD1819A-RTW
Q4201
2SD1819A-RTW
C4203
6V22/EVV
R4204
1R5M/J3
R4254
100K/J3
R4202
10K/J3
C4202
16V1/UBM
C4201
16V1/UBM
CH2_MIC
[P6004-26]
R4201
100K/J3
R4205
4700/J3
C4204
16V1/UFN
R4206
18K/J3
C4205
16V1/UFN
R4207
12K/J3
D4201
MA728-TX
C4206
10V10/STY
R4255
470/J3
R4209
10K/J3
C4207
16V1/UBM
C4235
16V1/UBM
R4208
82/J3
R4210
47/J3
Q4204
2SD1819A-RTW
Q4203
2SD1819A-RTW
C4208
6V22/EVV
R4211
100K/J3
VR_CH2
[P6004-18]
D5VC
L4701
47U/LC
R4703
10K/J3
R4706
220/J3
C4701
6V47/EVV
D4701
MA143-TW
C4702
6V47/EVV
C4703
0.1/UFV
R4708
33/J3
IC4701
UPC4558G2-T1
TP4701
EYF6CU
R4720
0/J3
R4715
330K/J3
Q4701
2SD1819A-RTW
4700/J3
R4704
QR4701
UN5213-TW
R4701
*PAT/J3
REC_CTL
(1)
CTP4701
R4705
10K/J3
R4707
5600/J3
C4704
8200P/UBV
R4709
5600/J3
VCC
VEE
R4711
100K/J3
R4712
1000/J3
C4707
16V1/UBM
C4706
0.1/UFV
-8V
IC4701
UPC4558G2-T1
R4710
100/J3
C4705
1000P/USV
R4713
82K/J3
R4714
18K/J3
-8V
QR4704
UN5213-TW
R4721
*PAT/J3
D5VC
R4716
10K/J3
QR4703
UN5213-TW
R4722
10K/J3
R4702
*PAT/J3
CTL_EDIT
(1)
CTP4702
QR4702
UN5213-TW
R4
*PA


4
5
6
7
8
9
10
11
R4154 100K/J3
R4102 10K/J3
R4101 100K/J3
R4103 47/J3
C4102 16V1/UBM
Q4102 2SD1819A-RTW
Q4208 2SB1219AQRTW
Q4101 2SD1819A-RTW
C4103 6V22/EVV
R4104 1R5M/J3
C4105 16V1/UFN
R4106 18K/J3
C4501 16V47/EVV
C4502 0.1/UFV
R4107 12K/J3
D4101 MA728-TX
R4105 4700/J3
C4104 16V1/UFN
C4106 10V10/STY
R4155 470/J3
R4109 10K/J3
C4107 16V1/UBM
C4135 16V1/UBM
R4108 82/J3
R4110 47/J3
Q4104 2SD1819A-RTW
Q4103 2SD1819A-RTW
C4108 6V22/EVV
R4112 0/J3
VR4101 5K/VR5
C4109 16V1/UFN
R4111 100K/J3
CH1 NORM
C4110 16V10/EVV
(4) CH1_LINE
C4111 16V1/UFN
R4113 10K/J3
R4114 8200/J3
D4102 MA728-TX
+4.5V
[P6004-16] VCR
IC4501
UPC5021GA069
CH1_IN
CH1_AGC_CONTROL
CH1_AGC
CH1_LIMITER
CH2_LIMITER
CH2_AGC
CH2_AGC_CONTROL
CH2_IN
CH1_AGC_GAIN
CH1_AGC_OUT
CH1_AGC_LEVEL
VCC
CH1_EVR
CH1_VCA_OUT
CH1_LIMITER_IN
CH1_LIMITER_CONTROL
CH1_OUT
CH1_LIMITER_LEVEL
CH1_LIMITER_OUT
REF.5V
1/2VCC_IN
CH2_LIMITER_OUT
CH2_LIMITER LEVEL
CH2_OUT
CH2_AGC_GAIN
CH2_AGC_OUT
CH2_AGC_LEVEL
CH2_EVR
GND
CH2_VCR_OUT
CH2_LIMITER_IN
CH2_LIMITER_CONTROL
C4211 16V1/UFN
R4213 10K/J3
C4503 16V1/UFN
C4519 6V330
C4520 6V100/EVV
R4214 8200/J3
D4202 MA728-TX
C4210 16V10/EVV
(4) CH2_LINE
R4203 47/J3
Q4202 2SD1819A-RTW
Q4201 2SD1819A-RTW
C4203 6V22/EVV
R4204 1R5M/J3
R4202 10K/J3
C4202 16V1/UBM
R4205 4700/J3
C4204 16V1/UFN
R4206 18K/J3
C4205 16V1/UFN
R4207 12K/J3
D4201 MA728-TX
C4206 10V10/STY
R4255 470/J3
R4209 10K/J3
C4207 16V1/UBM
C4235 16V1/UBM
R4208 82/J3
R4210 47/J3
Q4204 2SD1819A-RTW
Q4203 2SD1819A-RTW
C4208 6V22/EVV
R4211 100K/J3
CH2 NORM
VR4201 5K/VR5
C4209 16V1/UFN
R4212 0/J3
L4701 47U/LC
D4701 MA143-TW
C4702 6V47/EVV
C4703 0.1/UFV
R4708 33/J3
IC4701 UPC4558G2-T1
TP4701 EYF6CU
R4720 0/J3
R4707 5600/J3
C4704 8200P/UBV
R4709 5600/J3
VCC
VEE
R4712 1000/J3
C4707 16V1/UBM
R4715 330K/J3
IC4701 UPC4558G2-T1
R4711 100K/J3
C4706 0.1/UFV
-8V
R4710 100/J3
C4705 1000P/USV
R4713 82K/J3
R4714 18K/J3
-8V
D5VC
QR4704 UN5213-TW
R4721 *PAT/J3
[P6004-8] CTL_PULSE
(1) PB_CTL
R4716 10K/J3
QR4703 UN5213-TW
R4718 *PAT/J3
[P4001-9] CTL_-
R4717 *PAT/J3
[P4001-10] CTL_+
JS1

AUDIO SYSCON I／F 1 SCHEMATIC DIAGRAM 7／8 (E13:Page CBA-13)



1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
UNREG (1,2) CTP6001
ANA_-9V (5) CTP6003
B-Y [P6004-14] CTP6004
ANA_+9V (4) CTP6005
REC_FM (5) CTP6006
PB_Y (3) CTP6007
SVHS_L (2) CTP6008
VDREC_H (1) CTP6009
GAIN_CTL (1) CTP6010
ZEBRA_OSC (2) CTP6011
PB_HSS (3) CTP6012
ART_V (1) CTP6014
DATE_BL (2) CTP6015
DATE (2) CTP6016
HASW (1) CTP6017
A_HASW (1) CTP6018
SAFETY_ZONE (2) CTP6019
VITC (3) CTP6020
EE_H (1) CTP6021
EVF_Y [P6003-12] CTP6022
CAM_VP_L (2) CTP6023
CAM_SCK (2) CTP6024
CAM_DATAI (2) CTP6025
START_STOP (2) [P6003-4] CTP6026
POWER_ON [P6004-5] CTP6028
UNLOAD (1) CTP6030
LOAD (1) CTP6031
DRIVE_CLK (1) CTP6032
TENS_ON (1) CTP6033
TENS_OFF (1) CTP6034
C_SW_FULL (1) CTP6035
DIG_+5V (1,2,3)[P6004-20] CTP6036
Y [P6004-13] CTP6037
AUDIO_+5V (1,3,4,5) CTP6038
CTP6040
CTP6101
CTP6104
CTP6107
CTP6109
CTP6110
CTP6111
CTP6112
CTP6113
CTP6114
CTP6116
CTP6117
CTP6118
CTP6119
CTP6120
CTP6121
CTP6122
CTP6123
CTP6124
CTP6125
CTP6126
CTP6127
CTP6128
CTP6129
CTP6130
CTP6131
CTP6132
CTP6133
CTP6134
CTP6135
CTP6137
(5) ANA_-9V
[P6004-15] R-Y
(4) ANA_+9V
(5) PB_FM
(1) VENV_DET
(2) S_DET_H
(1) PB_L
(2) CHRA_BL
(2) CHRA
(1) V_ORP
(1) HSW
(1) A_ORP
(1) A_HSW
(1) FLY_E_L
(1) FMDREC_H
[P6003-9] ZEBRA_ON_L
(1) FLY_E_5V
(3) CPS_SYNC
(2) CAM_HD
(2) CAM_RQ
(2) CAM_DATAO
(2) RET_SW
(1) CAP_EC
(1) CAP_ECR
(1) CYL_EC
(1) CYL_ON_L
(1) CAP_TL
(1) CAP_RSF
(1) CAP_FG
(1) CYL_FG
(1) CYL_PG
[P6004-20](1,2,3) DIG_+5V
[P6004-11] 26CAM_VIDEO
(1,3,4,5) AUDIO_+5V
CTP6401
CTP6402
CTP6403
CTP6404
CTP6405
[CN60
CTP6406
CTP6407
CTP6408
CTP6409
CTP6410
CTP6411
[CN6
CTP6413
[CN6
CTP6414
[CN
CTP6415
[CN
CTP6416
CTP6417
CTP6418
CTP6419
CTP6421
CTP6422
[CN6001-
CTP6424
CTP6426
CTP6412

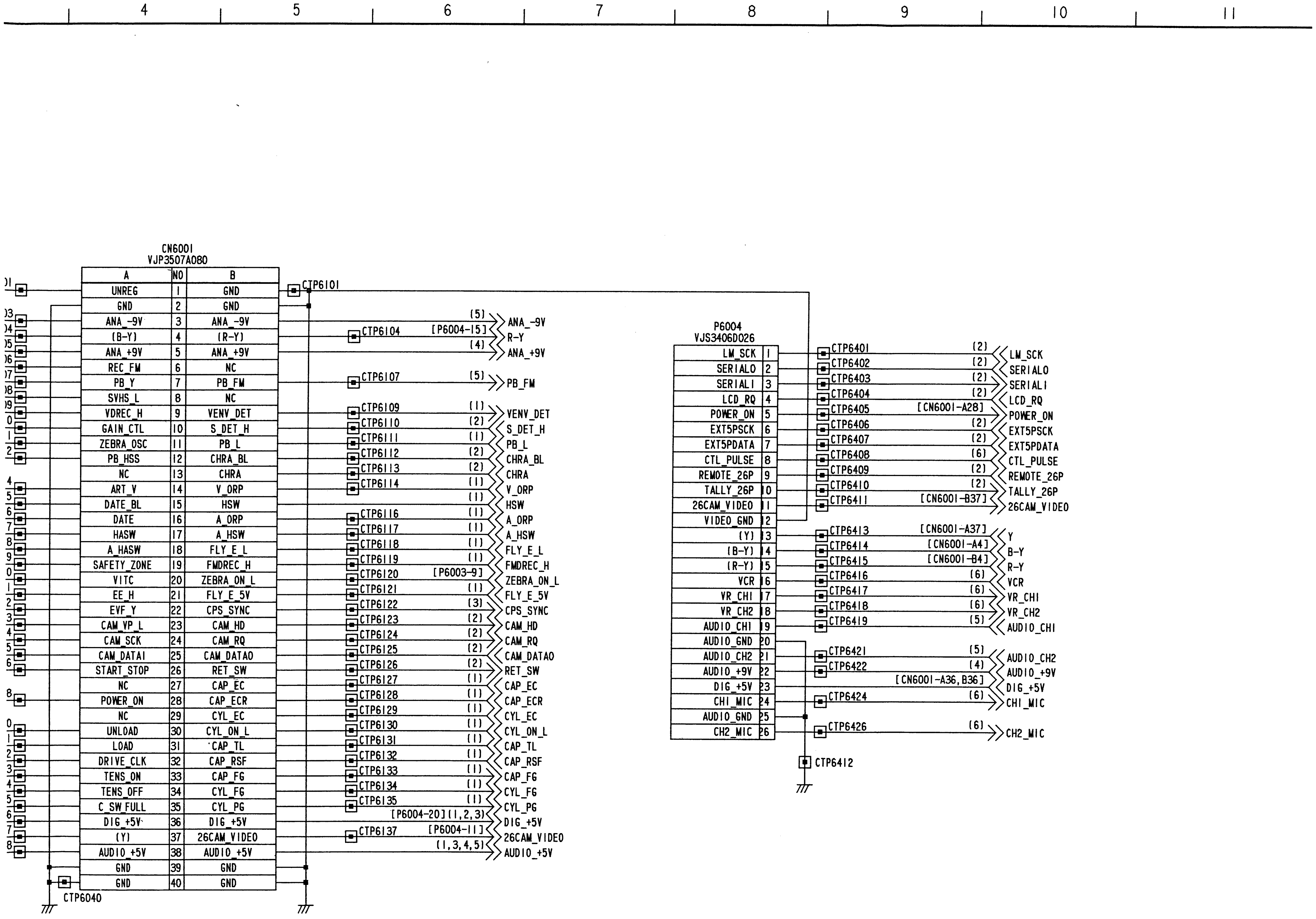
CN6001
VJP3507A080

A	NO	B
UNREG	1	GND
GND	2	GND
ANA_-9V	3	ANA_-9V
(B-Y)	4	(R-Y)
ANA_+9V	5	ANA_+9V
REC_FM	6	NC
PB_Y	7	PB_FM
SVHS_L	8	NC
VDREC_H	9	VENV_DET
GAIN_CTL	10	S_DET_H
ZEBRA_OSC	11	PB_L
PB_HSS	12	CHRA_BL
NC	13	CHRA
ART_V	14	V_ORP
DATE_BL	15	HSW
DATE	16	A_ORP
HASW	17	A_HSW
A_HASW	18	FLY_E_L
SAFETY_ZONE	19	FMDREC_H
VITC	20	ZEBRA_ON_L
EE_H	21	FLY_E_5V
EVF_Y	22	CPS_SYNC
CAM_VP_L	23	CAM_HD
CAM_SCK	24	CAM_RQ
CAM_DATAI	25	CAM_DATAO
START_STOP	26	RET_SW
NC	27	CAP_EC
POWER_ON	28	CAP_ECR
NC	29	CYL_EC
UNLOAD	30	CYL_ON_L
LOAD	31	CAP_TL
DRIVE_CLK	32	CAP_RSF
TENS_ON	33	CAP_FG
TENS_OFF	34	CYL_FG
C_SW_FULL	35	CYL_PG
DIG_+5V	36	DIG_+5V
(Y)	37	26CAM_VIDEO
AUDIO_+5V	38	AUDIO_+5V
GND	39	GND
GND	40	GND

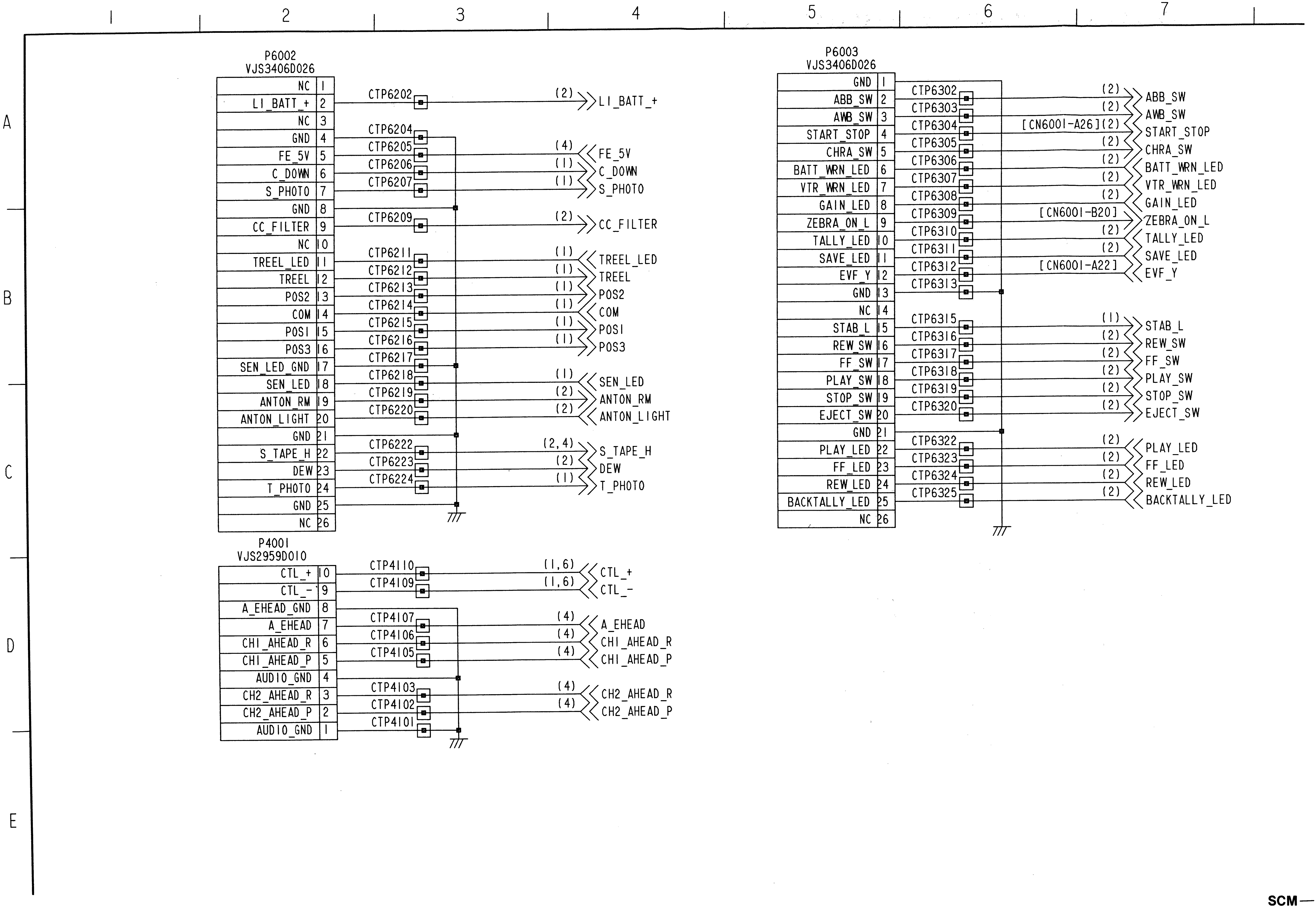
P6004
VJS3406D026

LM_SCK	1
SERIALO	2
SERIALI	3
LCD_RQ	4
POWER_ON	5
EXT5PSCK	6
EXT5PDATA	7
CTL_PULSE	8
REMOTE_26P	9
TALLY_26P	10
26CAM_VIDEO	11
VIDEO_GND	12
(Y)	13
(B-Y)	14
(R-Y)	15
VCR	16
VR_CH1	17
VR_CH2	18
AUDIO_CH1	19
AUDIO_GND	20
AUDIO_CH2	21
AUDIO_+9V	22
DIG_+5V	23
CH1_MIC	24
AUDIO_GND	25
CH2_MIC	26

C DIAGRAM 7／8（E13:Page CBA-13）


4
5
6
7
8
9
10
11
CN6001
VJP3507A080
A
NO
B
UNREG 1 GND
GND 2 GND
ANA_-9V 3 ANA_-9V
(B-Y) 4 (R-Y)
ANA_+9V 5 ANA_+9V
REC_FM 6 NC
PB_Y 7 PB_FM
SVHS_L 8 NC
VDREC_H 9 VENV_DET
GAIN_CTL 10 S_DET_H
ZEBRA_OSC 11 PB_L
PB_HSS 12 CHRA_BL
NC 13 CHRA
ART_V 14 V_ORP
DATE_BL 15 HSW
DATE 16 A_ORP
HASW 17 A_HSW
A_HASW 18 FLY_E_L
SAFETY_ZONE 19 FMDREC_H
VITC 20 ZEBRA_ON_L
EE_H 21 FLY_E_5V
EVF_Y 22 CPS_SYNC
CAM_VP_L 23 CAM_HD
CAM_SCK 24 CAM_RQ
CAM_DATAI 25 CAM_DATAO
START_STOP 26 RET_SW
NC 27 CAP_EC
POWER_ON 28 CAP_ECR
NC 29 CYL_EC
UNLOAD 30 CYL_ON_L
LOAD 31 CAP_TL
DRIVE_CLK 32 CAP_RSF
TENS_ON 33 CAP_FG
TENS_OFF 34 CYL_FG
C_SW_FULL 35 CYL_PG
DIG_+5V 36 DIG_+5V
(Y) 37 26CAM_VIDEO
AUDIO_+5V 38 AUDIO_+5V
GND 39 GND
GND 40 GND
CTP6040
CTP6101
CTP6104
(5) ANA_-9V
[P6004-15] R-Y
(4) ANA_+9V
CTP6107 (5) PB_FM
CTP6109 (1) VENV_DET
CTP6110 (2) S_DET_H
CTP6111 (1) PB_L
CTP6112 (2) CHRA_BL
CTP6113 (2) CHRA
CTP6114 (1) V_ORP
(1) HSW
CTP6116 (1) A_ORP
CTP6117 (1) A_HSW
CTP6118 (1) FLY_E_L
CTP6119 (1) FMDREC_H
CTP6120 [P6003-9] ZEBRA_ON_L
CTP6121 (1) FLY_E_5V
CTP6122 (3) CPS_SYNC
CTP6123 (2) CAM_HD
CTP6124 (2) CAM_RQ
CTP6125 (2) CAM_DATAO
CTP6126 (2) RET_SW
CTP6127 (1) CAP_EC
CTP6128 (1) CAP_ECR
CTP6129 (1) CYL_EC
CTP6130 (1) CYL_ON_L
CTP6131 (1) CAP_TL
CTP6132 (1) CAP_RSF
CTP6133 (1) CAP_FG
CTP6134 (1) CYL_FG
CTP6135 (1) CYL_PG
[P6004-20](1,2,3) DIG_+5V
CTP6137 [P6004-11] 26CAM_VIDEO
(1,3,4,5) AUDIO_+5V
P6004
VJS3406D026
LM_SCK 1
SERIALO 2
SERIALI 3
LCD_RQ 4
POWER_ON 5
EXT5PSCK 6
EXT5PDATA 7
CTL_PULSE 8
REMOTE_26P 9
TALLY_26P 10
26CAM_VIDEO 11
VIDEO_GND 12
(Y) 13
(B-Y) 14
(R-Y) 15
VCR 16
VR_CH1 17
VR_CH2 18
AUDIO_CH1 19
AUDIO_GND 20
AUDIO_CH2 21
AUDIO_+9V 22
DIG_+5V 23
CH1_MIC 24
AUDIO_GND 25
CH2_MIC 26
CTP6401 (2) LM_SCK
CTP6402 (2) SERIALO
CTP6403 (2) SERIALI
CTP6404 (2) LCD_RQ
CTP6405 [CN6001-A28] POWER_ON
CTP6406 (2) EXT5PSCK
CTP6407 (2) EXT5PDATA
CTP6408 (6) CTL_PULSE
CTP6409 (2) REMOTE_26P
CTP6410 (2) TALLY_26P
CTP6411 [CN6001-B37] 26CAM_VIDEO
CTP6413 [CN6001-A37] Y
CTP6414 [CN6001-A4] B-Y
CTP6415 [CN6001-B4] R-Y
CTP6416 (6) VCR
CTP6417 (6) VR_CH1
CTP6418 (6) VR_CH2
CTP6419 (5) AUDIO_CH1
CTP6421 (5) AUDIO_CH2
CTP6422 (4) AUDIO_+9V
[CN6001-A36, B36] DIG_+5V
CTP6424 (6) CH1_MIC
CTP6426 (6) CH2_MIC
CTP6412

AUDIO SYSCON I／F 2 SCHEMATIC DIAGRAM 8／8 (E13:Page CBA-13)



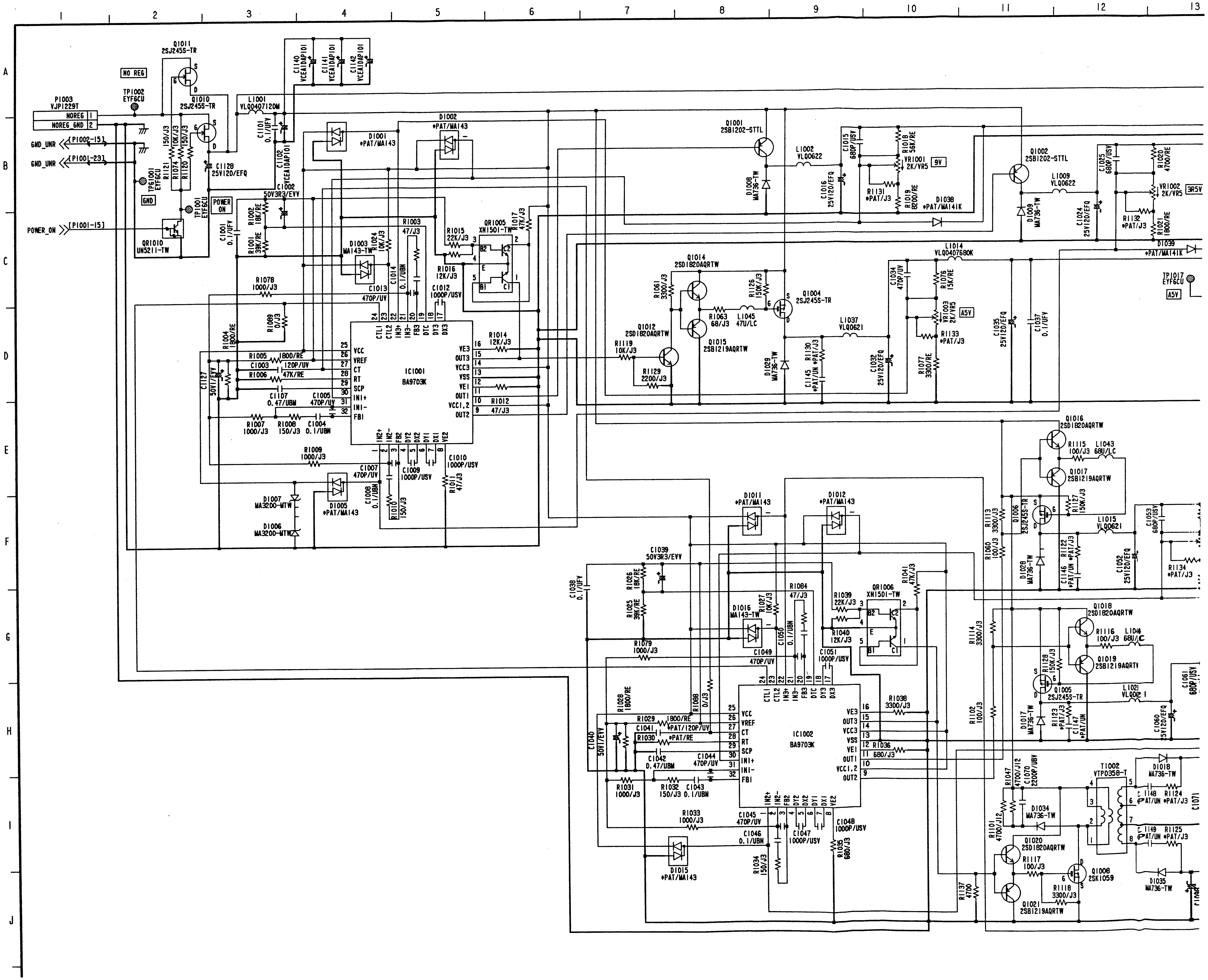
1
2
3
4
5
6
7
A
B
C
D
E
P6002
VJS3406D026
NC 1
LI_BATT_+ 2
NC 3
GND 4
FE_5V 5
C_DOWN 6
S_PHOTO 7
GND 8
CC_FILTER 9
NC 10
TREEL_LED 11
TREEL 12
POS2 13
COM 14
POS1 15
POS3 16
SEN_LED_GND 17
SEN_LED 18
ANTON_RM 19
ANTON_LIGHT 20
GND 21
S_TAPE_H 22
DEW 23
T_PHOTO 24
GND 25
NC 26
CTP6202
CTP6204
CTP6205
CTP6206
CTP6207
CTP6209
CTP6211
CTP6212
CTP6213
CTP6214
CTP6215
CTP6216
CTP6217
CTP6218
CTP6219
CTP6220
CTP6222
CTP6223
CTP6224
(2) LI_BATT_+
(4) FE_5V
(1) C_DOWN
(1) S_PHOTO
(2) CC_FILTER
(1) TREEL_LED
(1) TREEL
(1) POS2
(1) COM
(1) POS1
(1) POS3
(1) SEN_LED
(2) ANTON_RM
(2) ANTON_LIGHT
(2,4) S_TAPE_H
(2) DEW
(1) T_PHOTO
P4001
VJS2959D010
CTL_+ 10
CTL_- 9
A_EHEAD_GND 8
A_EHEAD 7
CH1_AHEAD_R 6
CH1_AHEAD_P 5
AUDIO_GND 4
CH2_AHEAD_R 3
CH2_AHEAD_P 2
AUDIO_GND 1
CTP4110
CTP4109
CTP4107
CTP4106
CTP4105
CTP4103
CTP4102
CTP4101
(1,6) CTL_+
(1,6) CTL_-
(4) A_EHEAD
(4) CH1_AHEAD_R
(4) CH1_AHEAD_P
(4) CH2_AHEAD_R
(4) CH2_AHEAD_P
P6003
VJS3406D026
GND 1
ABB_SW 2
AWB_SW 3
START_STOP 4
CHRA_SW 5
BATT_WRN_LED 6
VTR_WRN_LED 7
GAIN_LED 8
ZEBRA_ON_L 9
TALLY_LED 10
SAVE_LED 11
EVF_Y 12
GND 13
NC 14
STAB_L 15
REW_SW 16
FF_SW 17
PLAY_SW 18
STOP_SW 19
EJECT_SW 20
GND 21
PLAY_LED 22
FF_LED 23
REW_LED 24
BACKTALLY_LED 25
NC 26
CTP6302
CTP6303
CTP6304
CTP6305
CTP6306
CTP6307
CTP6308
CTP6309
CTP6310
CTP6311
CTP6312
CTP6313
CTP6315
CTP6316
CTP6317
CTP6318
CTP6319
CTP6320
CTP6322
CTP6323
CTP6324
CTP6325
(2) ABB_SW
(2) AWB_SW
[CN6001-A26](2) START_STOP
(2) CHRA_SW
(2) BATT_WRN_LED
(2) VTR_WRN_LED
(2) GAIN_LED
[CN6001-B20] ZEBRA_ON_L
(2) TALLY_LED
(2) SAVE_LED
[CN6001-A22] EVF_Y
(1) STAB_L
(2) REW_SW
(2) FF_SW
(2) PLAY_SW
(2) STOP_SW
(2) EJECT_SW
(2) PLAY_LED
(2) FF_LED
(2) REW_LED
(2) BACKTALLY_LED

AUDIO SYSCON COMPARISON CHART (E13:Page CBA-13)

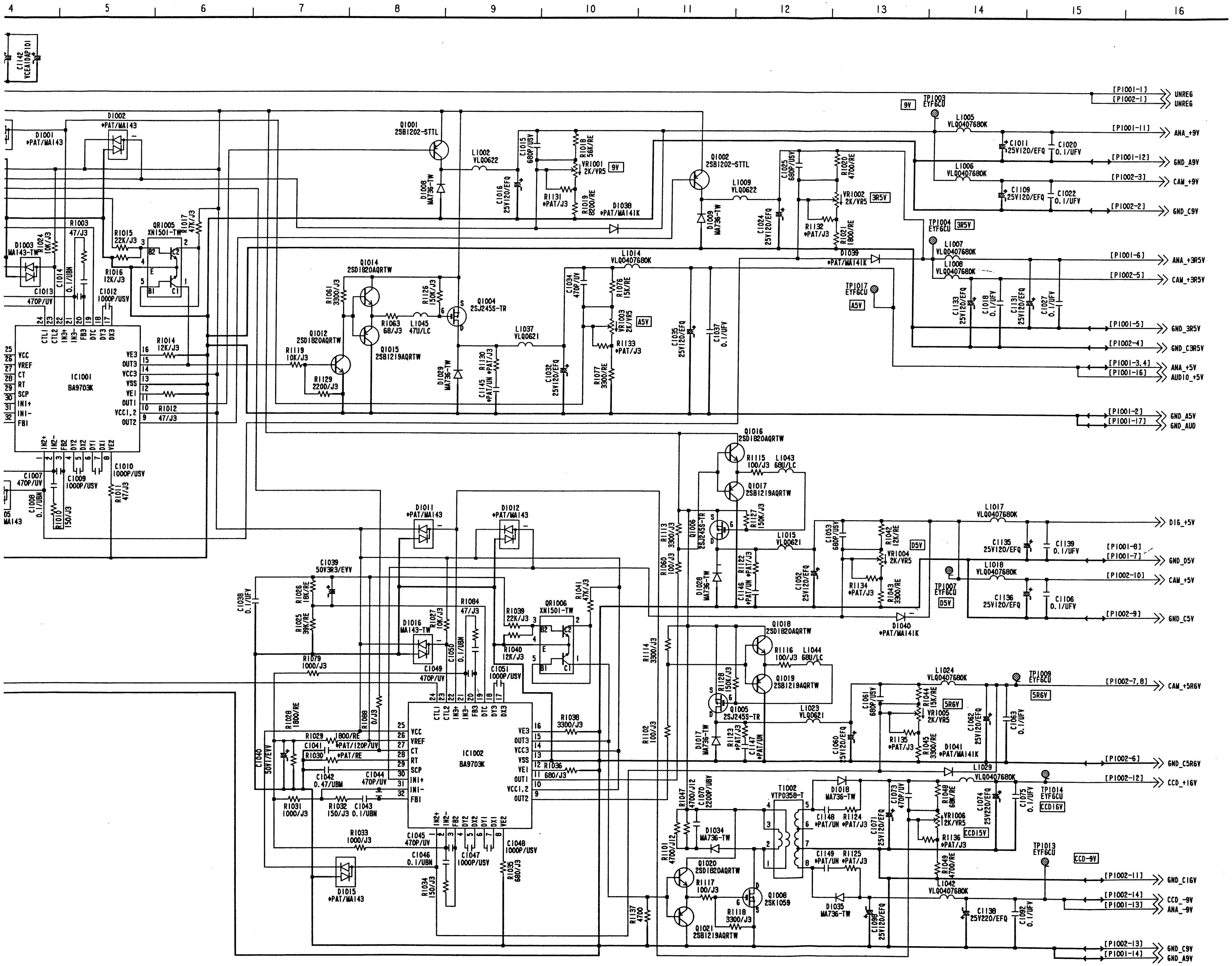
REF	NTSC-T	NTSC-P	PAL
C4116	*PAT/USV	*PAT/USV	*PAT/USV
C4121	8200P/HUB	8200P/HUB	0.01/HUB
C4122	0.01/HUB	0.01/HUB	4700P/HUB
C4216	*PAT/USV	*PAT/USV	*PAT/USV
C4221	8200P/HUB	8200P/HUB	0.01/HUB
C4222	0.01/HUB	0.01/HUB	4700P/HUB
C4301	*PAT/UV	*PAT/UV	*PAT/UV
C4401	*PAT/UV	*PAT/UV	*PAT/UV
C4424	*PAT/UV	*PAT/UV	390P/UV
C4425	470P/UV	470P/UV	390P/UV
C6009	*PAT/UBV	*PAT/UBV	*PAT/UBV
C6012	*PAT/UBV	*PAT/UBV	*PAT/UBV
C6013	*PAT/UBV	*PAT/UBV	*PAT/UBV
C6023	*PAT/UFV	*PAT/UFV	*PAT/UFV
C6506	22P/UV	22P/UV	12P/UV
C6507	*PAT/UV	*PAT/UV	12P/UV
C6510	*PAT/UV	*PAT/UV	*PAT/UV
C6526	*PAT/EVV	*PAT/EVV	*PAT/EVV
C6802	*PAT/UV	*PAT/UV	*PAT/UV
C6805	18P/UV	18P/UV	22P/UV
D6006	MA141K-TW	MA141K-TW	*PAT
FL4301	VLF0944-1T	VLF0944-1T	VLF0934-1T
FL4401	VLF0945-1T	VLF0945-1T	VLF0935-1T
IC6001	VSI1507B	VSI1507B	VSI1653
QR2007	*PAT	*PAT	*PAT
QR2008	*PAT	*PAT	*PAT
R4129	680/J3	680/J3	330/J3
R4130	820/J3	820/J3	470/J3
R4142	*PAT/J3	*PAT/J3	*PAT/J3
R4147	*PAT/J3	*PAT/J3	*PAT/J3
R4229	680/J3	680/J3	330/J3
R4230	820/J3	820/J3	470/J3
R4242	*PAT/J3	*PAT/J3	*PAT/J3
R4247	*PAT/J3	*PAT/J3	*PAT/J3
R4328	*PAT/J3	*PAT/J3	*PAT/J3
R4428	*PAT/J3	*PAT/J3	*PAT/J3
R4511	*PAT/J3	*PAT/J3	*PAT/J3
R4702	*PAT/J3	*PAT/J3	*PAT/J3
R4701	*PAT/J3	*PAT/J3	*PAT/J3
R4717	*PAT/J3	*PAT/J3	*PAT/J3
R4718	*PAT/J3	*PAT/J3	*PAT/J3
R4721	*PAT/J3	*PAT/J3	*PAT/J3
R6025	*PAT/J3	*PAT/J3	*PAT/J3
R6027	10K/J3	10K/J3	22K/J3
R6031	*PAT/J3	*PAT/J3	*PAT/J3
R6035	*PAT/J3	*PAT/J3	*PAT/J3
R6037	*PAT/J3	*PAT/J3	*PAT/J3
R6074	*PAT/J3	*PAT/J3	*PAT/J3
R6075	*PAT/J3	*PAT/J3	*PAT/J3
R6080	0/J3	0/J3	*PAT/J3
R6087	*PAT/J3	*PAT/J3	*PAT/J3
R6516	*PAT/J3	*PAT/J3	*PAT/J3
R6543	47K/J3	*PAT/J3	47K/J3
R6544	*PAT/J3	47K/J3	47K/J3
R6572	*PAT/J3	*PAT/J3	*PAT/J3
R6587	*PAT/J3	*PAT/J3	*PAT/J3
R6594	*PAT/RE	*PAT/RE	*PAT/RE
R6595	*PAT/J3	*PAT/J3	*PAT/J3
R6596	*PAT/J3	*PAT/J3	*PAT/J3
R6804	0/J3	0/J3	*PAT/J3
R6805	*PAT/J3	*PAT/J3	*PAT/J3
R6807	*PAT/J3	*PAT/J3	*PAT/J3
VC6502	*PAT	*PAT	*PAT
X6802	VSX0614-T	VSX0614-T	VSX0615-T

Note: NTSC-T... DOMESTIC MODEL
NTSC-P... EXPORT MODEL

POWER SCHEMATIC DIAGRAM 1／3（E10:Page CBA-15）


1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I
J
Q1011
2SJ245S-TR
NO REG
TP1002
EYF6CU
Q1010
2SJ245S-TR
P1003
VJP1229T
NOREG
NOREG_GND
GND_UNR
[P1002-15]
GND_UNR
[P1001-23]
POWER_ON
[P1001-15]
TP6100I
EYF6CU
R1121 150/J3
R1074 10K/J3
R1120 150/J3
C1128
25V120/EFQ
GND
TP1001
EYF6CU
POWER ON
QR1010
UN5211-TW
C1140
VCEA1DAP101
C1141
VCEA1DAP101
C1142
VCEA1DAP101
L1001
VLQ0407120M
C1101
0.1/UFY
C1102
VCEA1DAP101
C1002
50V3R3/EVV
C1001
0.1/UFY
R1002
18K/RE
R1001
39K/RE
D1001
●PAT/MA143
D1002
●PAT/MA143
D1003
MA143-TW
R1024
10K/J3
R1003
47/J3
R1015
22K/J3
R1016
12K/J3
QR1005
XN1501-TW
R1017
47K/J3
C1014
0.1/UBM
C1013
470P/UV
C1012
1000P/USV
R1078
1000/J3
R1089
0/J3
R1004
1800/RE
R1005
1800/RE
C1003
120P/UV
R1006
47K/RE
C1127
50V1/EVV
C1107
0.47/UBM
C1005
470P/UV
R1007
1000/J3
R1008
150/J3
C1004
0.1/UBM
IC1001
BA9703K
VCC
VREF
CT
RT
SCP
IN1+
IN1-
FB1
VE3
OUT3
VCC3
VSS
VE1
OUT1
VCC1,2
OUT2
CTL1
CTL2
IN3+
IN3-
FB3
DTC
DY3
DX3
IN2+
IN2-
FB2
DY2
DX2
DY1
DX1
VE2
R1014
12K/J3
R1012
47/J3
R1009
1000/J3
C1007
470P/UV
C1009
1000P/USV
C1010
1000P/USV
R1011
47/J3
C1008
0.1/UBM
R1010
150/J3
D1007
MA3200-MTW
D1005
●PAT/MA143
D1006
MA3200-MTW
Q1001
2SB1202-STTL
D1008
MA736-TW
L1002
VLQ0622
C1015
680P/USV
C1016
25V120/EFQ
R1018
56K/RE
VR1001
2K/VR5
9V
R1131
●PAT/J3
R1019
8200/RE
D1038
●PAT/MA141K
Q1002
2SB1202-STTL
L1009
VLQ0622
D1009
MA736-TW
C1024
25V120/EFQ
C1025
680P/USV
R1020
4700/RE
VR1002
2K/VR5
3R5V
R1132
●PAT/J3
R1021
1800/RE
D1039
●PAT/MA141K
Q1014
2SD1820AQRTW
R1061
3300/J3
R1126
150K/J3
Q1004
2SJ245S-TR
R1063
68/J3
L1045
47U/LC
Q1012
2SD1820AQRTW
Q1015
2SB1219AQRTW
R1119
10K/J3
R1129
2200/J3
D1029
MA736-TW
R1130
●PAT/J3
C1145
●PAT/UN
L1037
VLQ0621
C1032
25V120/EFQ
L1014
VLQ0407680K
C1034
470P/UV
R1076
15K/RE
VR1003
2K/VR5
A5V
R1133
●PAT/J3
R1077
3300/RE
C1035
25V120/EFQ
C1037
0.1/UFY
TP1017
EYF6CU
A5V
Q1016
2SD1820AQRTW
R1115
100/J3
L1043
68U/LC
Q1017
2SB1219AQRTW
R1113
3300/J3
Q1006
2SJ245S-TR
R1127
150K/J3
L1015
VLQ0621
C1053
680P/USV
R1060
100/J3
D1028
MA736-TW
C1146
●PAT/UN
R1122
●PAT/J3
C1052
25V120/EFQ
R1134
●PAT/J3
D1011
●PAT/MA143
D1012
●PAT/MA143
C1039
50V3R3/EVV
C1038
0.1/UFY
R1026
18K/RE
R1025
39K/RE
D1016
MA143-TW
R1027
10K/J3
R1084
47/J3
R1039
22K/J3
QR1006
XN1501-TW
R1041
47K/J3
R1040
12K/J3
C1050
0.1/UBM
R1079
1000/J3
C1049
470P/UV
C1051
1000P/USV
R1114
3300/J3
Q1018
2SD1820AQRTW
R1116
100/J3
L1044
68U/LC
R1128
150K/J3
Q1019
2SB1219AQRTW
Q1005
2SJ245S-TR
L1021
VLQ0621
C1061
680P/USV
R1028
1800/RE
R1088
0/J3
R1029
1800/RE
C1041
●PAT/120P/UV
R1030
●PAT/RE
C1040
50V1/EVV
C1042
0.47/UBM
C1044
470P/UV
R1031
1000/J3
R1032
150/J3
C1043
0.1/UBM
IC1002
BA9703K
R1038
3300/J3
R1036
680/J3
R1102
100/J3
D1017
MA736-TW
R1123
●PAT/J3
C1147
●PAT/UN
C1060
25V120/EFQ
R1033
1000/J3
C1045
470P/UV
C1046
0.1/UBM
C1047
1000P/USV
C1048
1000P/USV
R1035
680/J3
R1034
150/J3
D1015
●PAT/MA143
R1047
4700/J12
C1070
2200P/UBY
T1002
VTP0358-T
D1018
MA736-TW
C1148
●PAT/UN
R1124
●PAT/J3
C1071
D1034
MA736-TW
C1149
●PAT/UN
R1125
●PAT/J3
R1101
4700/J12
Q1020
2SD1820AQRTW
R1117
100/J3
Q1008
2SK1059
R1118
3300/J3
D1035
MA736-TW
R1137
4700
Q1021
2SB1219AQRTW

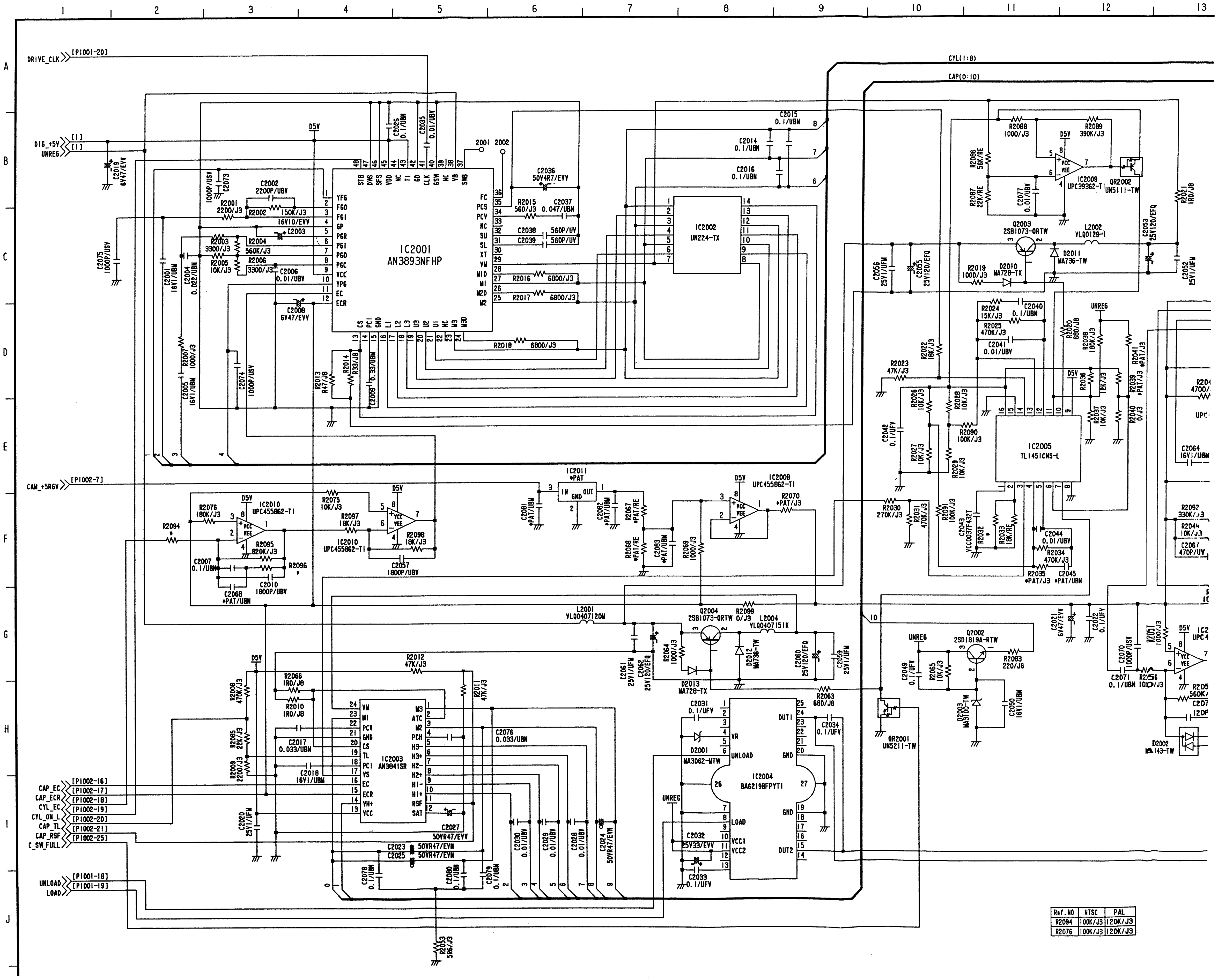
/3 (E10:Page CBA-15)


4
5
6
7
8
9
10
11
12
13
14
15
16
IC1001
BA9703K
IC1002
BA9703K
Q1001
2SB1202-STTL
Q1002
2SB1202-STTL
Q1004
2SJ245S-TR
Q1005
2SJ245S-TR
Q1008
2SK1059
QR1005
XN1501-TW
QR1006
XN1501-TW
T1002
VTP0358-T
[P1001-1]
[P1002-1]
UNREG
UNREG
[P1001-11]
ANA_+9V
[P1001-12]
GND_A9V
[P1002-3]
CAM_+9V
[P1002-2]
GND_C9V
[P1001-6]
ANA_+3R5V
[P1002-5]
CAM_+3R5V
[P1001-5]
GND_3R5V
[P1002-4]
GND_C3R5V
[P1001-3,4]
[P1001-16]
ANA_+5V
AUDIO_+5V
[P1001-2]
[P1001-17]
GND_A5V
GND_AUD
DIG_+5V
[P1001-8]
[P1001-7]
GND_D5V
[P1002-10]
CAM_+5V
[P1002-9]
GND_C5V
[P1002-7,8]
CAM_+5R6V
[P1002-6]
GND_C5R6V
[P1002-12]
CCD_+16V
[P1002-11]
GND_C16V
[P1002-14]
[P1001-13]
CCD_-9V
ANA_-9V
[P1002-13]
[P1001-14]
GND_C9V
GND_A9V
9V
3R5V
A5V
D5V
5R6V
CCD16V
CCD15V
CCD-9V

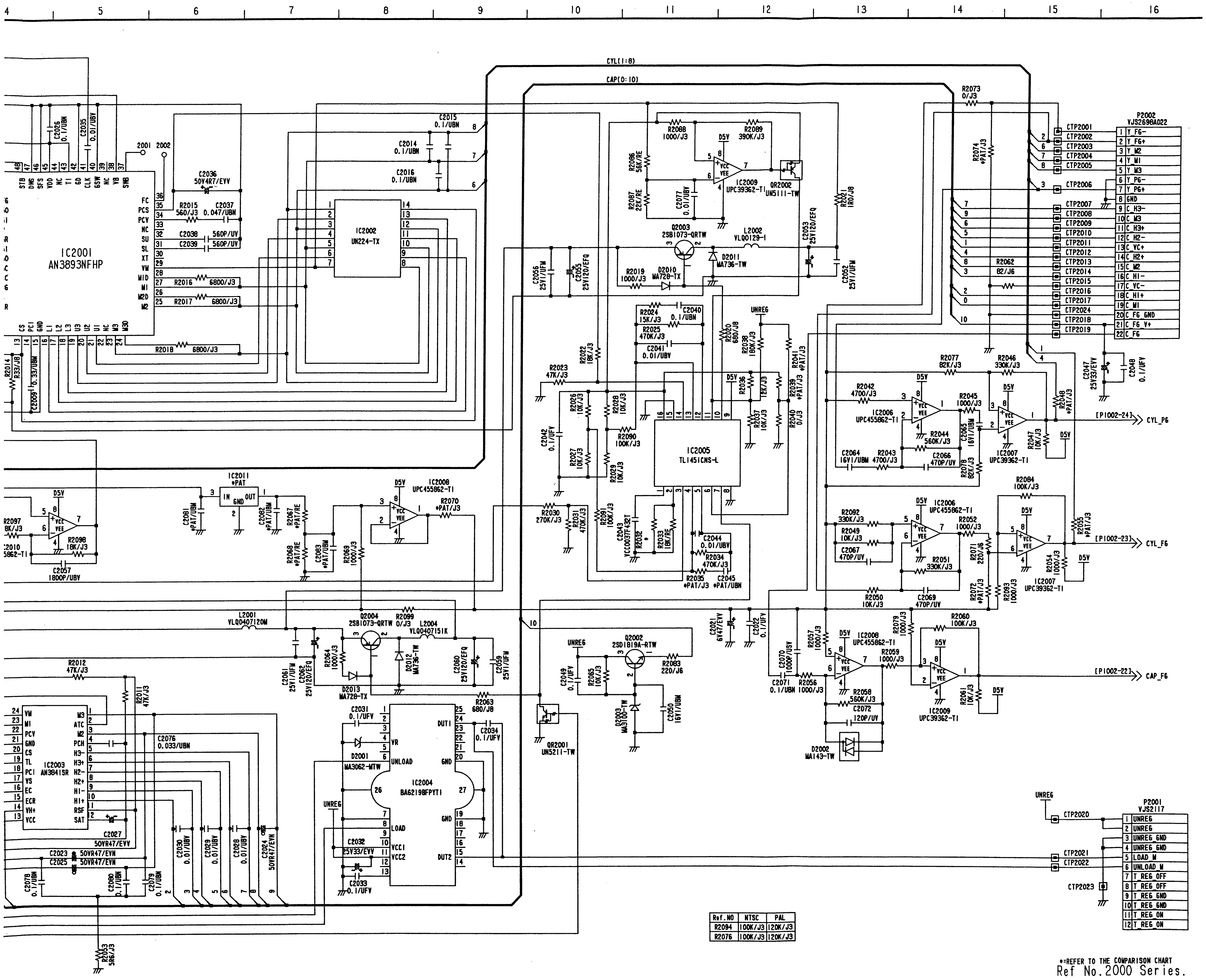
*=REFER TO THE COMPARISON CHART

Ref No.1000 Series.

DRIVE SCHEMATIC DIAGRAM 2／3（E10:Page CBA-15）


DRIVE_CLK [P1001-20]
DIG_+5V [1]
UNREG [1]
CAM_+5RGV [P1002-7]
CAP_EC [P1002-16]
CAP_ECR [P1002-17]
CYL_EC [P1002-18]
CYL_ON_L [P1002-19]
CAP_TL [P1002-20]
CAP_RSF [P1002-21]
C_SW_FULL [P1002-25]
UNLOAD [P1001-18]
LOAD [P1001-19]
CYL(1:8)
CAP(0:10)
IC2001 AN3893NFHP
IC2002 UN224-TX
IC2003 AN3841SR
IC2004 BA6219BFPYT1
IC2005 TL1451CNS-L
IC2008 UPC455862-T1
IC2009 UPC39362-T1
IC2010 UPC455862-T1
IC2011 *PAT
Q2002 2SD1819A-RTW
Q2003 2SB1073-QRTW
Q2004 2SB1073-QRTW
QR2001 UN5211-TW
QR2002 UN5111-TW
D2001 MA3062-MTW
D2002 MA143-TW
D2003 MA3100-TW
D2010 MA728-TX
D2011 MA736-TW
D2012 MA736-TW
D2013 MA728-TX
L2001 VLQ0407120M
L2002 VLQ0129-1
L2004 VLQ0407151K
D5V
2001
2002
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13

Ref.NO	NTSC	PAL
R2094	100K/J3	120K/J3
R2076	100K/J3	120K/J3

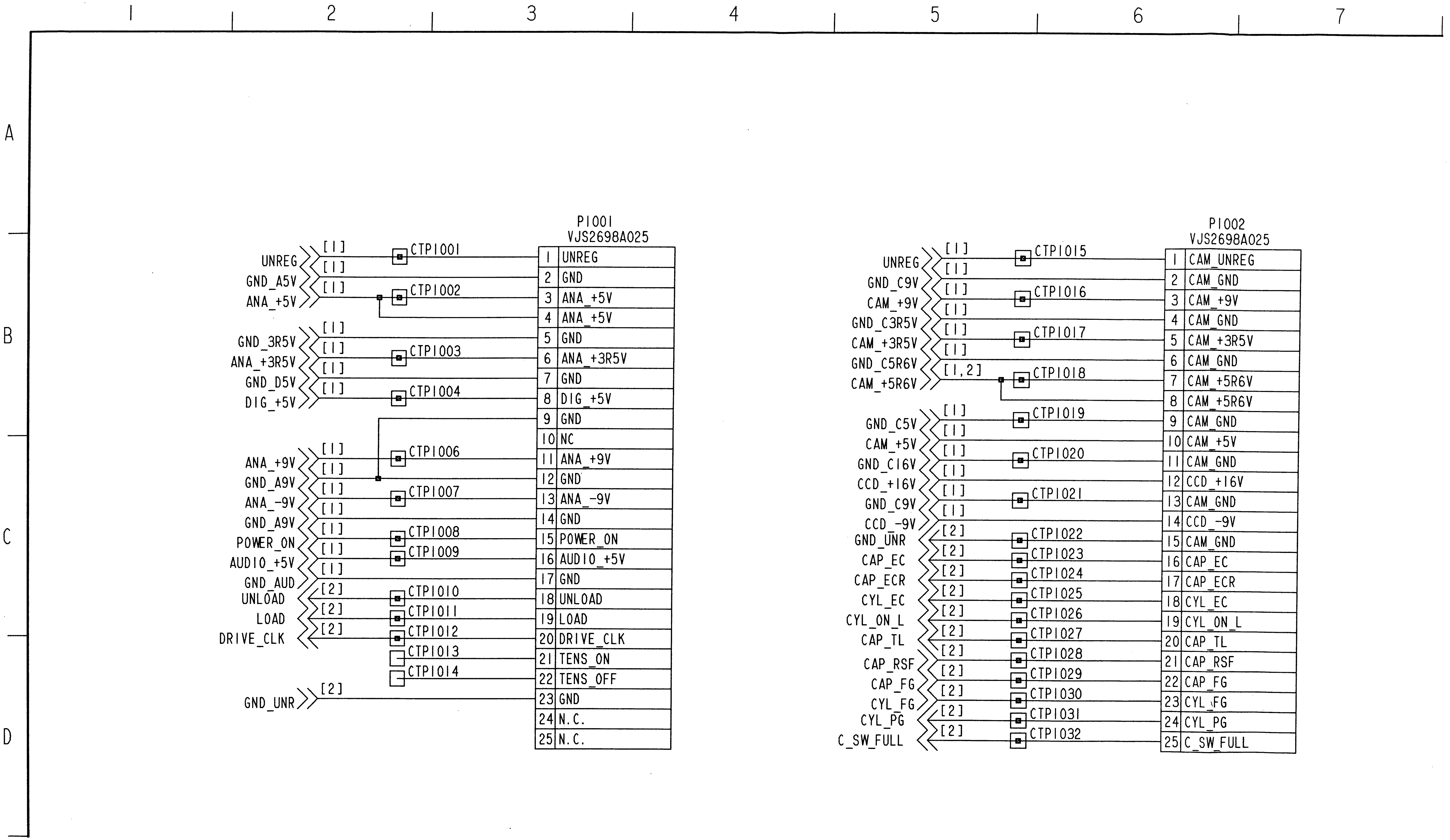

4
5
6
7
8
9
10
11
12
13
14
15
16
CYL(1:8)
CAP(0:10)
IC2001
AN3893NFHP
STB
DWG
SFS
VDD
NC
TI
GD
CLK
GSW
NC
VB
SNB
FC
PCS
PCV
NC
SU
SL
XT
VM
MID
MI
M2D
M2
C2026 0.1/UBN
C2035 0.01/UBV
2001
2002
C2036 50V4R7/EVV
R2015 560/J3
C2037 0.047/UBN
C2038 560P/UV
C2039 560P/UV
R2016 6800/J3
R2017 6800/J3
R2018 6800/J3
R2014 R33/J8
C2009 0.33/UBN
IC2002
UN224-TX
C2015 0.1/UBN
C2014 0.1/UBN
C2016 0.1/UBN
R2068 1000/J3
R2089 390K/J3
D5V
R2086 56K/RE
R2087 22K/RE
C2077 0.01/UBV
IC2009 UPC39362-TI
QR2002 UN5111-TW
R2021 1R0/J8
Q2003 2SB1073-QRTW
L2002 VLQ0129-1
C2053 25V120/EFQ
D2011 MA736-TW
C2052 25V1/UFM
C2056 25V1/UFM
C2055 25V120/EFQ
R2019 1000/J3
D2010 MA728-TX
R2024 15K/J3
C2040 0.1/UBN
R2025 470K/J3
C2041 0.01/UBV
UNREG
R2020 680/J8
R2038 180K/J3
R2041 *PAT/J3
R2022 18K/J3
R2023 47K/J3
R2026 10K/J3
R2028 10K/J3
R2036 18K/J3
R2039 *PAT/J3
R2037 10K/J3
R2040 0/J3
R2090 100K/J3
C2042 0.1/UFV
R2027 10K/J3
R2029 10K/J3
IC2005
TL1451CNS-L
R2091 180K/J3
C2043 VCC003TF432T
R2032 *
R2033 18K/RE
C2044 0.01/UBV
R2034 470K/J3
R2035 *PAT/J3
C2045 *PAT/UBN
R2073 0/J3
R2074 *PAT/J3
R2062 82/J6
P2002
VJS2698A022
CTP2001
CTP2002
CTP2003
CTP2004
CTP2005
CTP2006
CTP2007
CTP2008
CTP2009
CTP2010
CTP2011
CTP2012
CTP2013
CTP2014
CTP2015
CTP2016
CTP2017
CTP2024
CTP2018
CTP2019
1 Y_FG-
2 Y_FG+
3 Y_M2
4 Y_M1
5 Y_M3
6 Y_PG-
7 Y_PG+
8 GND
9 C_H3-
10 C_M3
11 C_H3+
12 C_H2-
13 C_VC+
14 C_H2+
15 C_M2
16 C_H1-
17 C_VC-
18 C_H1+
19 C_M1
20 C_FG_GND
21 C_FG_V+
22 C_FG
C2047 25V33/EVV
C2048 0.1/UFV
R2077 82K/J3
R2046 330K/J3
R2042 4700/J3
IC2006 UPC455862-TI
R2045 1000/J3
R2048 *PAT/J3
[P1002-24] CYL_PG
R2044 560K/J3
C2065 16V1/UBM
C2064 16V1/UBM
R2043 4700/J3
C2066 470P/UV
R2078 82K/J3
IC2007 UPC39362-TI
R2047 10K/J3
R2084 100K/J3
R2092 330K/J3
R2049 10K/J3
C2067 470P/UV
R2052 1000/J3
R2051 330K/J3
R2055 *PAT/J3
[P1002-23] CYL_FG
R2071 220/J6
R2072 *PAT/J3
R2093 1000/J3
R2054 1000/J3
R2050 10K/J3
C2069 470P/UV
C2021 6V47/EVV
C2022 0.1/UFV
C2070 1000P/USV
R2057 1000/J3
IC2008 UPC455862-TI
R2079 1000/J3
R2060 100K/J3
R2059 1000/J3
[P1002-22] CAP_FG
C2071 0.1/UBN
R2056 1000/J3
R2058 560K/J3
C2072 120P/UV
R2061 10K/J3
IC2009 UPC39362-TI
D2002 MA143-TW
R2097 8K/J3
IC2010 455862-TI
R2098 18K/J3
C2057 1800P/UBV
IC2011 *PAT
IN GND OUT
C2081 *PAT/UBN
C2082 *PAT/UBN
R2067 *PAT/RE
R2068 *PAT/RE
C2083 *PAT/UBN
R2069 1000/J3
IC2008 UPC455862-TI
R2070 *PAT/J3
R2030 270K/J3
R2031 470K/J3
L2001 VLQ0407120M
Q2004 2SB1073-QRTW
R2099 0/J3
L2004 VLQ0407151K
R2064 1000/J3
D2012 MA736-TW
C2060 25V120/EFQ
C2059 25V1/UFM
C2061 25V1/UFM
C2062 25V120/EFQ
D2013 MA728-TX
R2012 47K/J3
R2011 47K/J3
UNREG
Q2002 2SD1819A-RTW
R2083 220/J6
C2049 0.1/UFV
R2065 10K/J3
D2003 MA3100-TW
C2050 16V1/UBM
R2063 680/J8
QR2001 UN5211-TW
IC2003 AN3841SR
VM M1 PCV GND CS TL PC1 VS EC ECR VH+ VCC
M3 ATC M2 PCH H3- H3+ H2- H2+ H1- H1+ RSF SAT
C2076 0.033/UBN
C2027 50VR47/EVV
C2023 50VR47/EVN
C2025 50VR47/EVN
C2030 0.01/UBV
C2029 0.01/UBV
C2028 0.01/UBV
C2024 50VR47/EVN
C2078 0.1/UBN
C2080 0.1/UBN
C2079 0.1/UBN
R2053 5R6/J3
C2031 0.1/UFV
VR
D2001 MA3062-MTW
UNLOAD
LOAD
VCC1
VCC2
IC2004
BA6219BFPYT1
OUT1
OUT2
GND
C2034 0.1/UFV
C2032 25V33/EVV
C2033 0.1/UFV
UNREG
CTP2020
CTP2021
CTP2022
CTP2023
P2001
VJS2117
1 UNREG
2 UNREG
3 UNREG_GND
4 UNREG_GND
5 LOAD_M
6 UNLOAD_M
7 T_REG_OFF
8 T_REG_OFF
9 T_REG_GND
10 T_REG_GND
11 T_REG_ON
12 T_REG_ON

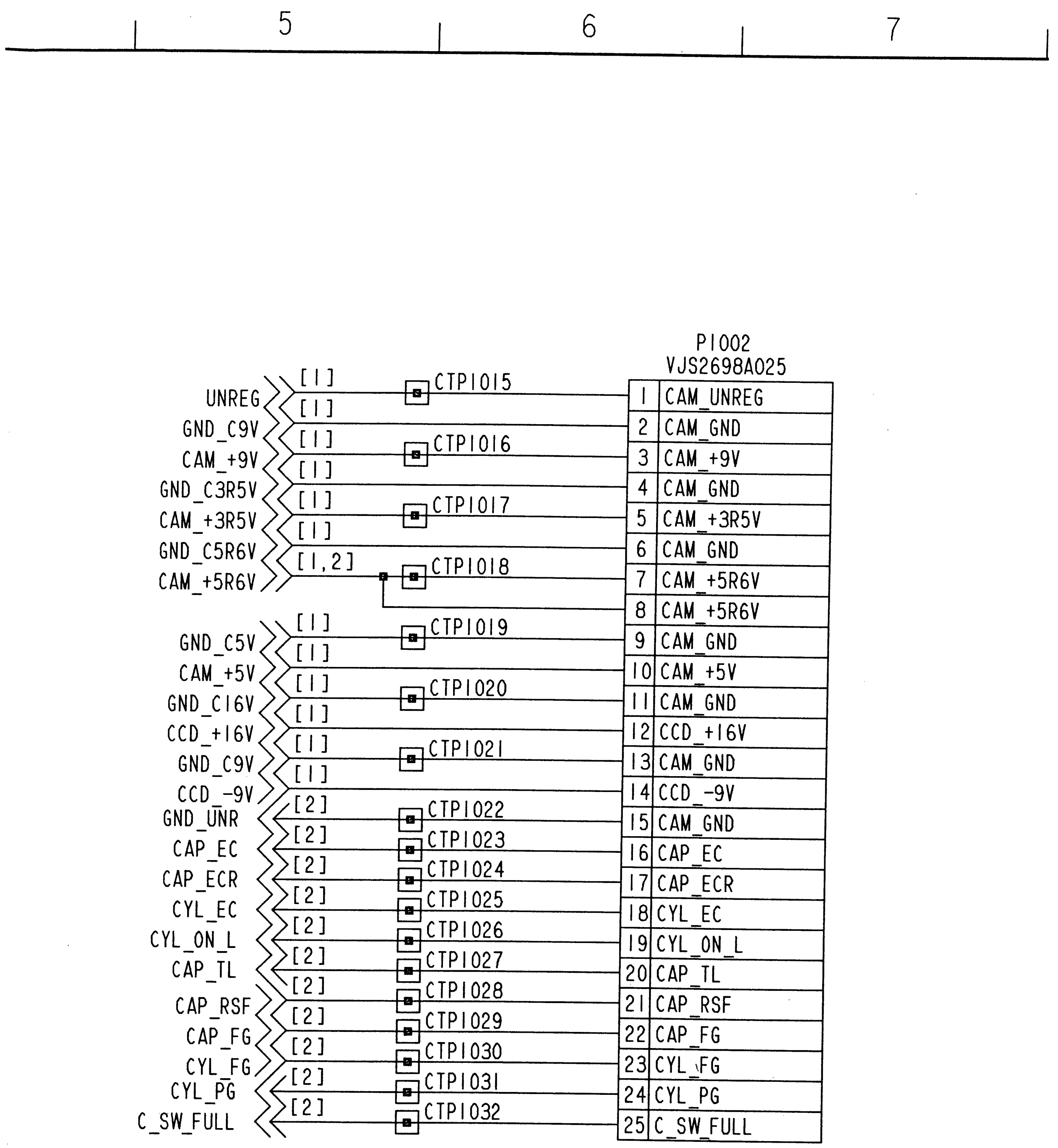
Ref.NO	NTSC	PAL
R2094	100K/J3	120K/J3
R2076	100K/J3	120K/J3

*=REFER TO THE COMPARISON CHART

Ref No.2000 Series.

POWER SCHEMATIC DIAGRAM 3／3（E10:Page CBA-15）

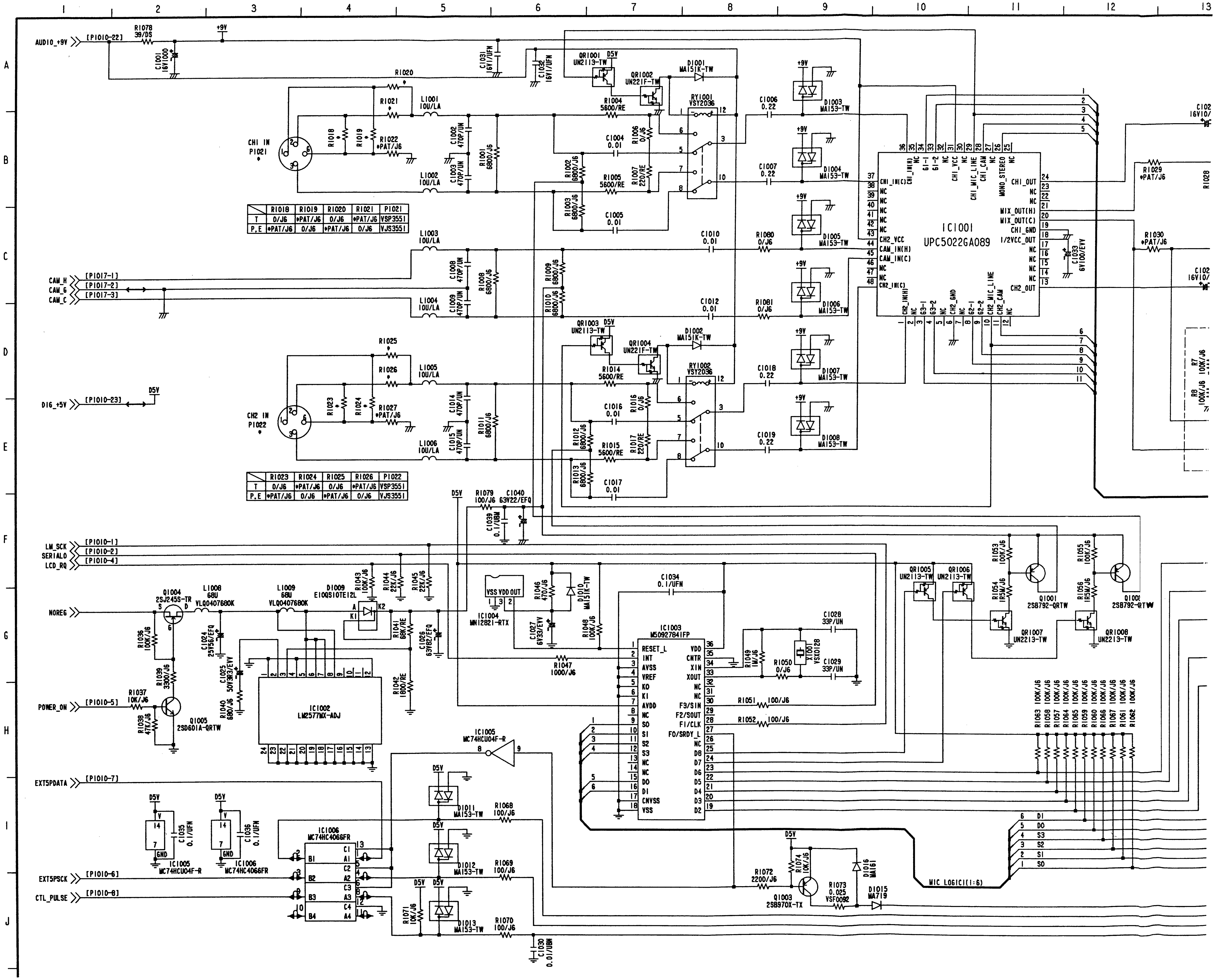

1
2
3
4
5
6
7
A
B
C
D
P1001
VJS2698A025
UNREG [1] CTP1001 1 UNREG
GND_A5V [1] 2 GND
ANA_+5V [1] CTP1002 3 ANA_+5V
4 ANA_+5V
GND_3R5V [1] 5 GND
ANA_+3R5V [1] CTP1003 6 ANA_+3R5V
GND_D5V [1] 7 GND
DIG_+5V [1] CTP1004 8 DIG_+5V
9 GND
10 NC
ANA_+9V [1] CTP1006 11 ANA_+9V
GND_A9V [1] 12 GND
ANA_-9V [1] CTP1007 13 ANA_-9V
GND_A9V [1] 14 GND
POWER_ON [1] CTP1008 15 POWER_ON
AUDIO_+5V [1] CTP1009 16 AUDIO_+5V
GND_AUD [1] 17 GND
UNLOAD [2] CTP1010 18 UNLOAD
LOAD [2] CTP1011 19 LOAD
DRIVE_CLK [2] CTP1012 20 DRIVE_CLK
CTP1013 21 TENS_ON
CTP1014 22 TENS_OFF
GND_UNR [2] 23 GND
24 N.C.
25 N.C.
P1002
VJS2698A025
UNREG [1] CTP1015 1 CAM_UNREG
GND_C9V [1] 2 CAM_GND
CAM_+9V [1] CTP1016 3 CAM_+9V
GND_C3R5V [1] 4 CAM_GND
CAM_+3R5V [1] CTP1017 5 CAM_+3R5V
GND_C5R6V [1] 6 CAM_GND
CAM_+5R6V [1,2] CTP1018 7 CAM_+5R6V
8 CAM_+5R6V
GND_C5V [1] CTP1019 9 CAM_GND
CAM_+5V [1] 10 CAM_+5V
GND_C16V [1] CTP1020 11 CAM_GND
CCD_+16V [1] 12 CCD_+16V
GND_C9V [1] CTP1021 13 CAM_GND
CCD_-9V [1] 14 CCD_-9V
GND_UNR [2] CTP1022 15 CAM_GND
CAP_EC [2] CTP1023 16 CAP_EC
CAP_ECR [2] CTP1024 17 CAP_ECR
CYL_EC [2] CTP1025 18 CYL_EC
CYL_ON_L [2] CTP1026 19 CYL_ON_L
CAP_TL [2] CTP1027 20 CAP_TL
CAP_RSF [2] CTP1028 21 CAP_RSF
CAP_FG [2] CTP1029 22 CAP_FG
CYL_FG [2] CTP1030 23 CYL_FG
CYL_PG [2] CTP1031 24 CYL_PG
C_SW_FULL [2] CTP1032 25 C_SW_FULL


5
6
7
P1002
VJS2698A025
UNREG
GND_C9V
CAM_+9V
GND_C3R5V
CAM_+3R5V
GND_C5R6V
CAM_+5R6V
GND_C5V
CAM_+5V
GND_C16V
CCD_+16V
GND_C9V
CCD_-9V
GND_UNR
CAP_EC
CAP_ECR
CYL_EC
CYL_ON_L
CAP_TL
CAP_RSF
CAP_FG
CYL_FG
CYL_PG
C_SW_FULL
[1]
[1,2]
[2]
CTP1015
CTP1016
CTP1017
CTP1018
CTP1019
CTP1020
CTP1021
CTP1022
CTP1023
CTP1024
CTP1025
CTP1026
CTP1027
CTP1028
CTP1029
CTP1030
CTP1031
CTP1032
1 CAM_UNREG
2 CAM_GND
3 CAM_+9V
4 CAM_GND
5 CAM_+3R5V
6 CAM_GND
7 CAM_+5R6V
8 CAM_+5R6V
9 CAM_GND
10 CAM_+5V
11 CAM_GND
12 CCD_+16V
13 CAM_GND
14 CCD_-9V
15 CAM_GND
16 CAP_EC
17 CAP_ECR
18 CYL_EC
19 CYL_ON_L
20 CAP_TL
21 CAP_RSF
22 CAP_FG
23 CYL_FG
24 CYL_PG
25 C_SW_FULL

POWER COMPARISON CHART
(E10:Page CBA-15)

REF	NTSC	PAL
C1041	*PAT/UV	*PAT/UV
C1145	*PAT/UBN	*PAT/UBN
C1146	*PAT/UBN	*PAT/UBN
C1147	*PAT/UBN	*PAT/UBN
C1148	*PAT/UBN	*PAT/UBN
C1149	*PAT/UBN	*PAT/UBN
C2045	*PAT/UBN	*PAT/UBN
C2068	*PAT/UBN	*PAT/UBN
C2081	*PAT/UBM	*PAT/UBM
C2082	*PAT/UBM	*PAT/UBM
C2083	*PAT/UBM	*PAT/UBM
D1001	*PAT	*PAT
D1002	*PAT	*PAT
D1005	*PAT	*PAT
D1011	*PAT	*PAT
D1012	*PAT	*PAT
D1015	*PAT	*PAT
D1038	*PAT	*PAT
D1039	*PAT	*PAT
D1040	*PAT	*PAT
D1041	*PAT	*PAT
IC2011	*PAT	*PAT
R1030	*PAT/RE	*PAT/RE
R1122	*PAT/J3	*PAT/J3
R1123	*PAT/J3	*PAT/J3
R1124	*PAT/J3	*PAT/J3
R1125	*PAT/J3	*PAT/J3
R1130	*PAT/J3	*PAT/J3
R1131	*PAT/J3	*PAT/J3
R1132	*PAT/J3	*PAT/J3
R1133	*PAT/J3	*PAT/J3
R1134	*PAT/J3	*PAT/J3
R1135	*PAT/J3	*PAT/J3
R1136	*PAT/J3	*PAT/J3
R2032	330K/RE	*PAT/RE
R2035	*PAT/J3	*PAT/J3
R2039	*PAT/J3	*PAT/J3
R2041	*PAT/J3	*PAT/J3
R2048	*PAT/J3	*PAT/J3
R2055	*PAT/J3	*PAT/J3
R2067	*PAT/RE	*PAT/RE
R2068	*PAT/RE	*PAT/RE
R2070	*PAT/J3	*PAT/J3
R2072	*PAT/J3	*PAT/J3
R2074	*PAT/J3	*PAT/J3
R2094	100K/J3	120K/J3
R2096	100K/J3	120K/J3

REAR JACK SCHEMATIC DIAGRAM 1／2 (E6:Page CBA-9)

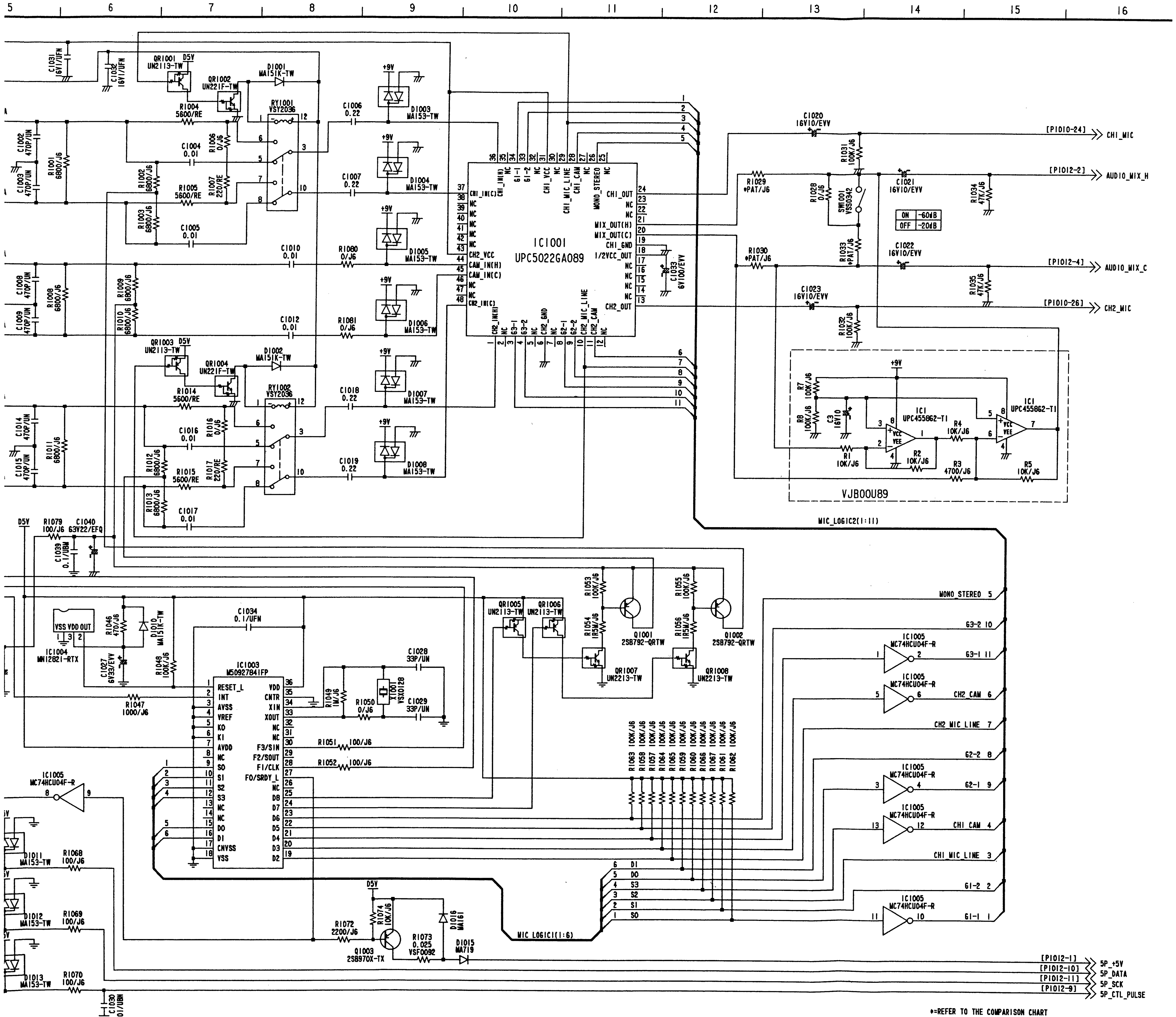


1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I
J
AUDIO_+9V
[P1010-22]
R1078 39/DS
+9V
C1001 16V100
C1031 6V1/UFN
C1032 16V1/UFN
R1020
R1021
L1001 10U/LA
CH1 IN P1021
R1018
R1019
R1022 *PAT/J6
C1002 470P/UN
C1003 470P/UN
L1002 10U/LA
R1001 6800/J6
QR1001 UN2113-TW
D5V
QR1002 UN221F-TW
D1001 MA151K-TW
R1004 5600/RE
RY1001 VSY2036
C1004 0.01
R1006 0/J6
R1002 6800/J6
R1003 6800/J6
R1005 5600/RE
R1007 220/RE
C1005 0.01
C1006 0.22
C1007 0.22
D1003 MA153-TW
D1004 MA153-TW
D1005 MA153-TW
D1006 MA153-TW
D1007 MA153-TW
D1008 MA153-TW
L1003 10U/LA
C1008 470P/UN
R1008 6800/J6
R1009 6800/J6
CAM_H
CAM_G
CAM_C
[P1017-1]
[P1017-2]
[P1017-3]
L1004 10U/LA
C1009 470P/UN
R1010 6800/J6
C1010 0.01
R1080 0/J6
C1012 0.01
R1081 0/J6
IC1001 UPC5022GA089
CH1_IN(C)
CH2_VCC
CAM_IN(H)
CAM_IN(C)
CH2_IN(C)
CH1_OUT
MIX_OUT(H)
MIX_OUT(C)
CH1_GND
1/2VCC_OUT
CH2_OUT
MONO_STEREO
CH1_MIC_LINE
CH1_CAM
CH1_VCC
CH2_MIC_LINE
CH2_CAM
CH2_GND
C1033 6V100/EVV
R1029 *PAT/J6
R1030 *PAT/J6
C102 16V10/
R1028
R1025
R1026
L1005 10U/LA
CH2 IN P1022
R1023
R1024
R1027 *PAT/J6
C1014 470P/UN
C1015 470P/UN
L1006 10U/LA
R1011 6800/J6
QR1003 UN2113-TW
QR1004 UN221F-TW
D1002 MA151K-TW
R1014 5600/RE
RY1002 VSY2036
C1016 0.01
R1016 0/J6
R1012 6800/J6
R1013 6800/J6
R1015 5600/RE
R1017 220/RE
C1017 0.01
C1018 0.22
C1019 0.22
DIG_+5V
[P1010-23]
R1079 100/J6
C1040 63V22/EFQ
C1039 0.1/UBM
LM_SCK
SERIALO
LCD_RQ
[P1010-1]
[P1010-2]
[P1010-4]
NOREG
Q1004 2SJ245S-TR
L1008 68U VLQ0407680K
L1009 68U VLQ0407680K
D1009 E10QS10TE12L
R1043 100K/J6
R1044 22K/J6
R1045 22K/J6
R1036 100K/J6
C1024 25V56/EFQ
C1025 50V3R3/EVV
R1040 680/J6
R1041 68K/RE
C1026 63V82/EFQ
R1042 1800/RE
IC1002 LM2577MX-ADJ
POWER_ON
[P1010-5]
R1037 10K/J6
R1038 47K/J6
R1039 3300/J6
Q1005 2SD601A-QRTW
IC1004 MM1282I-RTX
R1046 470/J6
D1010 MA151K-TW
C1027 6V33/EVV
R1048 100K/J6
R1047 1000/J6
C1034 0.1/UFN
IC1003 M50927841FP
RESET_L
INT
AVSS
VREF
KO
KI
AVDD
S0
S1
S2
S3
DO
DI
CNVSS
VSS
VDD
CNTR
XIN
XOUT
F3/SIN
F2/SOUT
F1/CLK
FO/SRDY_L
C1028 33P/UN
C1029 33P/UN
R1049 1M/J6
R1050 0/J6
X1001 VSX0128
R1051 100/J6
R1052 100/J6
QR1005 UN2113-TW
QR1006 UN2113-TW
QR1007 UN2213-TW
QR1008 UN2213-TW
R1053 100K/J6
R1054 1R5M/J6
R1055 100K/J6
R1056 1R5M/J6
Q1001 2SB792-QRTW
Q1002 2SB792-QRTW
IC1005 MC74HCU04F-R
EXT5PDATA
[P1010-7]
EXT5PSCK
[P1010-6]
CTL_PULSE
[P1010-8]
C1035 0.1/UFN
C1036 0.1/UFN
IC1006 MC74HC4066FR
D1011 MA153-TW
D1012 MA153-TW
D1013 MA153-TW
R1068 100/J6
R1069 100/J6
R1070 100/J6
R1071 10K/J6
C1030 0.01/UBN
R1072 2200/J6
R1074 10K/J6
Q1003 2SB970X-TX
R1073 0.025 VSF0092
D1016 MA161
D1015 MA719
MIC LOGIC(1:6)
R1063 100K/J6
R1058 100K/J6
R1064 100K/J6
R1065 100K/J6
R1059 100K/J6
R1060 100K/J6
R1066 100K/J6
R1067 100K/J6
R1061 100K/J6
R1062 100K/J6
R7 100K/J6
R8 100K/J6

	R1018	R1019	R1020	R1021	P1021
T	0/J6	*PAT/J6	0/J6	*PAT/J6	VSP3551
P.E	*PAT/J6	0/J6	*PAT/J6	0/J6	VJS3551

	R1023	R1024	R1025	R1026	P1022
T	0/J6	*PAT/J6	0/J6	*PAT/J6	VSP3551
P.E	*PAT/J6	0/J6	*PAT/J6	0/J6	VJS3551

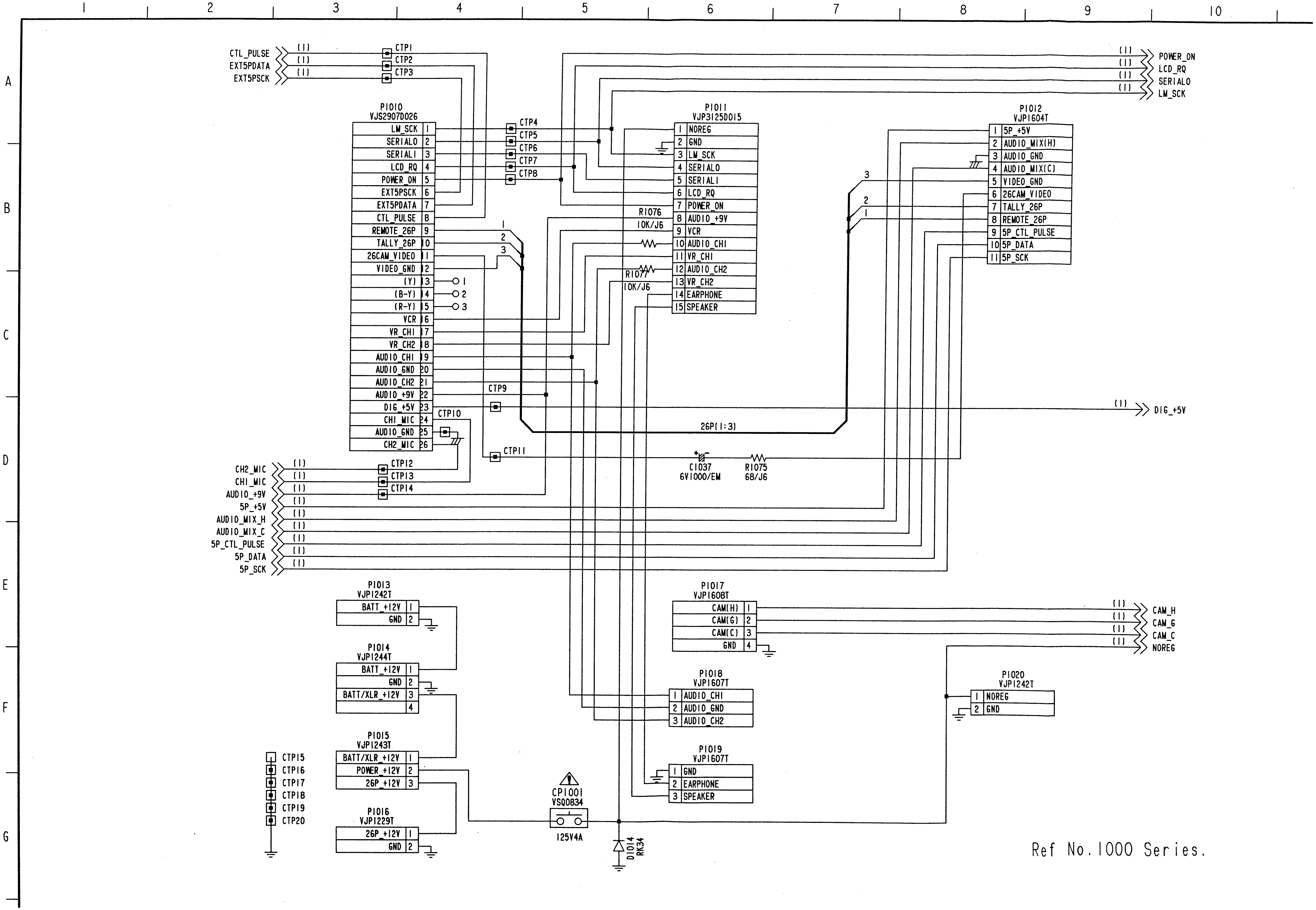
E6:Page CBA-9)


IC1001
UPC5022GA089
IC1003
M50927841FP
IC1004
MN12821-RTX
IC1005
MC74HCU04F-R
IC1
UPC455862-T1
VJB00U89
RY1001
VSY2036
RY1002
VSY2036
QR1001
UN2113-TW
QR1002
UN221F-TW
QR1003
UN2113-TW
QR1004
UN221F-TW
QR1005
UN2113-TW
QR1006
UN2113-TW
QR1007
UN2213-TW
QR1008
UN2213-TW
Q1001
2SB792-QRTW
Q1002
2SB792-QRTW
Q1003
2SB970X-TX
D1001
MA151K-TW
D1002
MA151K-TW
D1003
MA153-TW
D1004
MA153-TW
D1005
MA153-TW
D1006
MA153-TW
D1007
MA153-TW
D1008
MA153-TW
D1010
MA151K-TW
D1011
MA153-TW
D1012
MA153-TW
D1013
MA153-TW
D1015
MA719
D1016
MA161
X1001
VSX0128
SW1001
VSS0042
ON -60dB
OFF -20dB
[P1010-24] CH1_MIC
[P1012-2] AUDIO_MIX_H
[P1012-4] AUDIO_MIX_C
[P1010-26] CH2_MIC
MIC_LOGIC2(1:11)
MIC_LOGIC1(1:6)
MONO_STEREO 5
G3-2 10
G3-1 11
CH2_CAM 6
CH2_MIC_LINE 7
G2-2 8
G2-1 9
CH1_CAM 4
CH1_MIC_LINE 3
G1-2 2
G1-1 1
[P1012-1] 5P_+5V
[P1012-10] 5P_DATA
[P1012-11] 5P_SCK
[P1012-9] 5P_CTL_PULSE
D5V
+9V

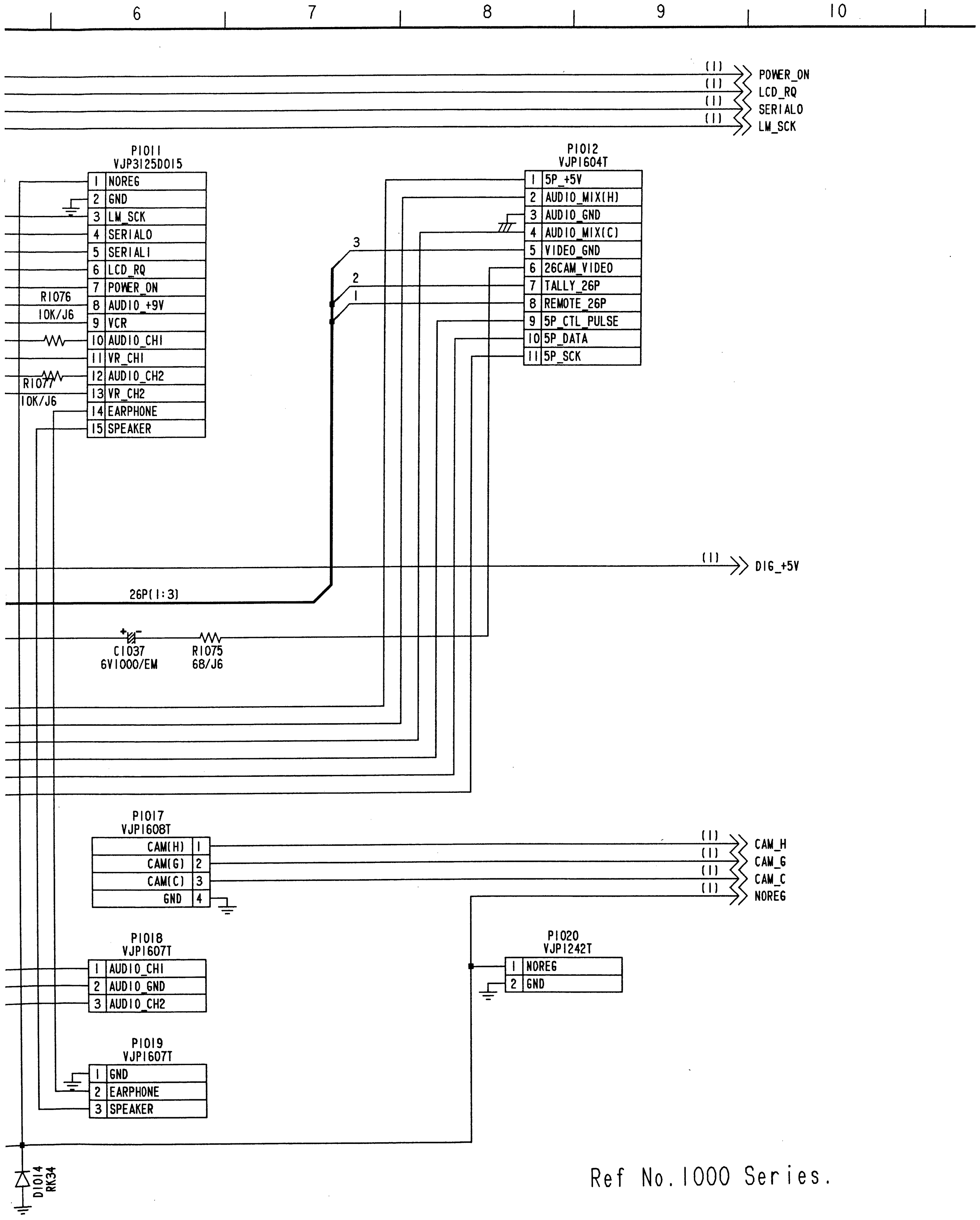
*=REFER TO THE COMPARISON CHART

Ref No.1000 Series.

REAR JACK SCHEMATIC DIAGRAM 2／2 (E6:Page CBA-9)


1 2 3 4 5 6 7 8 9 10
A B C D E F G
CTL_PULSE
EXT5PDATA
EXT5PSCK
CTP1
CTP2
CTP3
POWER_ON
LCD_RQ
SERIALO
LM_SCK
P1010
VJS2907D026
1 LM_SCK
2 SERIALO
3 SERIALI
4 LCD_RQ
5 POWER_ON
6 EXT5PSCK
7 EXT5PDATA
8 CTL_PULSE
9 REMOTE_26P
10 TALLY_26P
11 26CAM_VIDEO
12 VIDEO_GND
13 (Y)
14 (B-Y)
15 (R-Y)
16 VCR
17 VR_CH1
18 VR_CH2
19 AUDIO_CH1
20 AUDIO_GND
21 AUDIO_CH2
22 AUDIO_+9V
23 DIG_+5V
24 CH1_MIC
25 AUDIO_GND
26 CH2_MIC
CTP4
CTP5
CTP6
CTP7
CTP8
CTP9
CTP10
CTP11
P1011
VJP3125D015
1 NOREG
2 GND
3 LM_SCK
4 SERIALO
5 SERIALI
6 LCD_RQ
7 POWER_ON
8 AUDIO_+9V
9 VCR
10 AUDIO_CH1
11 VR_CH1
12 AUDIO_CH2
13 VR_CH2
14 EARPHONE
15 SPEAKER
R1076
10K/J6
R1077
10K/J6
P1012
VJP1604T
1 5P_+5V
2 AUDIO_MIX(H)
3 AUDIO_GND
4 AUDIO_MIX(C)
5 VIDEO_GND
6 26CAM_VIDEO
7 TALLY_26P
8 REMOTE_26P
9 5P_CTL_PULSE
10 5P_DATA
11 5P_SCK
26P(1:3)
DIG_+5V
C1037
6V1000/EM
R1075
68/J6
CH2_MIC
CH1_MIC
AUDIO_+9V
5P_+5V
AUDIO_MIX_H
AUDIO_MIX_C
5P_CTL_PULSE
5P_DATA
5P_SCK
CTP12
CTP13
CTP14
P1013
VJP1242T
BATT_+12V
GND
P1014
VJP1244T
BATT_+12V
GND
BATT/XLR_+12V
P1015
VJP1243T
BATT/XLR_+12V
POWER_+12V
26P_+12V
P1016
VJP1229T
26P_+12V
GND
P1017
VJP1608T
CAM(H)
CAM(G)
CAM(C)
GND
CAM_H
CAM_G
CAM_C
NOREG
P1018
VJP1607T
1 AUDIO_CH1
2 AUDIO_GND
3 AUDIO_CH2
P1019
VJP1607T
1 GND
2 EARPHONE
3 SPEAKER
P1020
VJP1242T
1 NOREG
2 GND
CP1001
VSQ0834
125V4A
D1014
RK34
CTP15
CTP16
CTP17
CTP18
CTP19
CTP20
(1)

Ref No.1000 Series.


6
7
8
9
10
(1) POWER_ON
(1) LCD_RQ
(1) SERIALO
(1) LM_SCK
P1011
VJP3125D015
1 NOREG
2 GND
3 LM_SCK
4 SERIALO
5 SERIALI
6 LCD_RQ
7 POWER_ON
8 AUDIO_+9V
9 VCR
10 AUDIO_CH1
11 VR_CH1
12 AUDIO_CH2
13 VR_CH2
14 EARPHONE
15 SPEAKER
R1076
10K/J6
R1077
10K/J6
P1012
VJP1604T
1 5P_+5V
2 AUDIO_MIX(H)
3 AUDIO_GND
4 AUDIO_MIX(C)
5 VIDEO_GND
6 26CAM_VIDEO
7 TALLY_26P
8 REMOTE_26P
9 5P_CTL_PULSE
10 5P_DATA
11 5P_SCK
3
2
1
(1) DIG_+5V
26P(1:3)
C1037
6V1000/EM
R1075
68/J6
P1017
VJP1608T
CAM(H) 1
CAM(G) 2
CAM(C) 3
GND 4
(1) CAM_H
(1) CAM_G
(1) CAM_C
(1) NOREG
P1018
VJP1607T
1 AUDIO_CH1
2 AUDIO_GND
3 AUDIO_CH2
P1020
VJP1242T
1 NOREG
2 GND
P1019
VJP1607T
1 GND
2 EARPHONE
3 SPEAKER
D1014
RK34

Ref No.1000 Series.

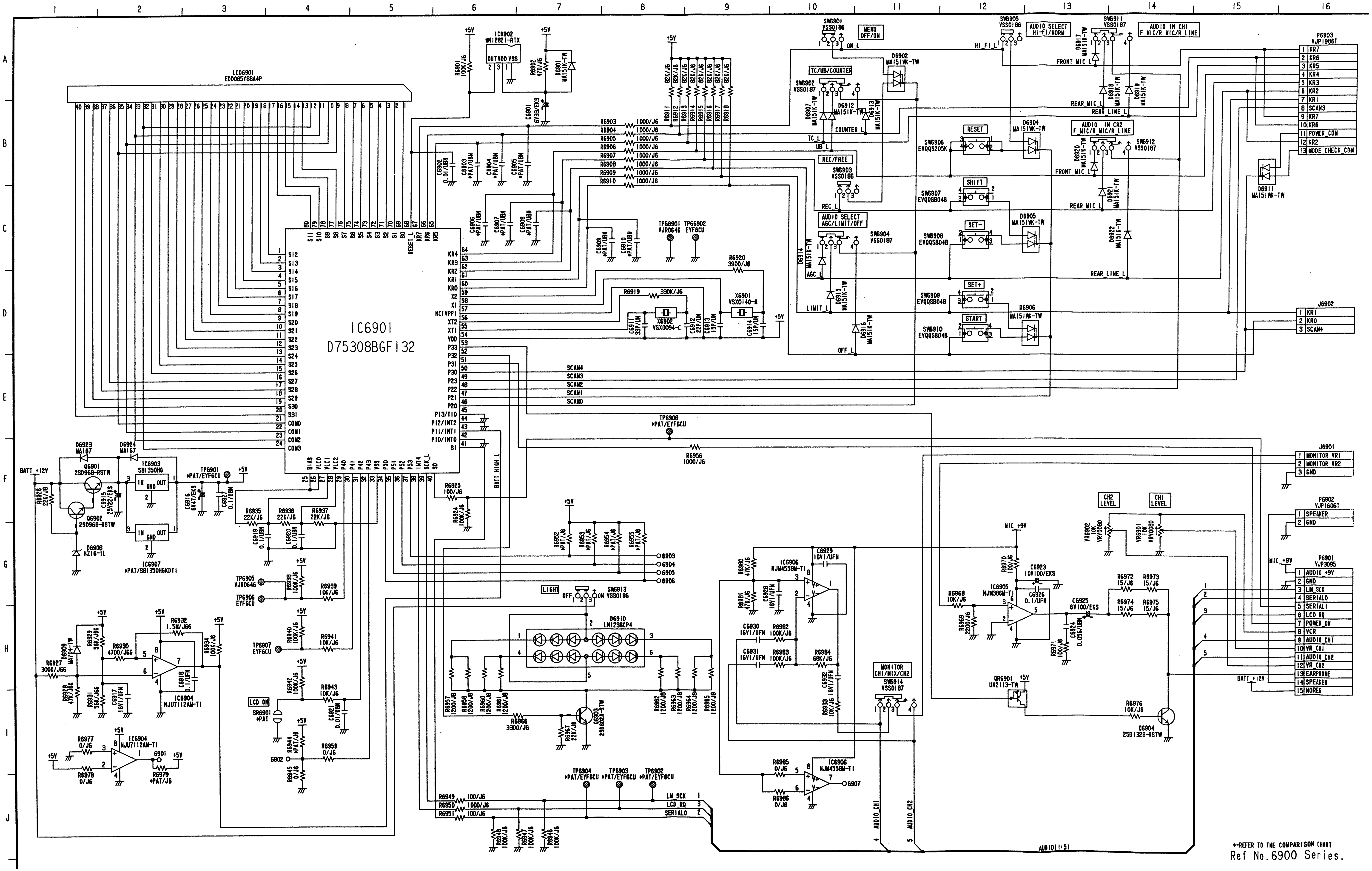
REAR JACK COMPARISON CHART
(E6:Page CBA-9)

==================================

REF	D190-T	D190-PE
R1018	0/J6	*PAT/J6
R1019	*PAT/J6	0/J6
R1020	0/J6	*PAT/J6
R1021	*PAT/J6	0/J6
R1023	0/J6	*PAT/J6
R1024	*PAT/J6	0/J6
R1025	0/J6	*PAT/J6
R1026	*PAT/J6	0/J6
R1029	*PAT/J6	*PAT/J6
R1030	*PAT/J6	*PAT/J6
R1033	*PAT/J6	*PAT/J6
P1021	VJP3551	VJS3551
P1022	VJP3551	VJS3551

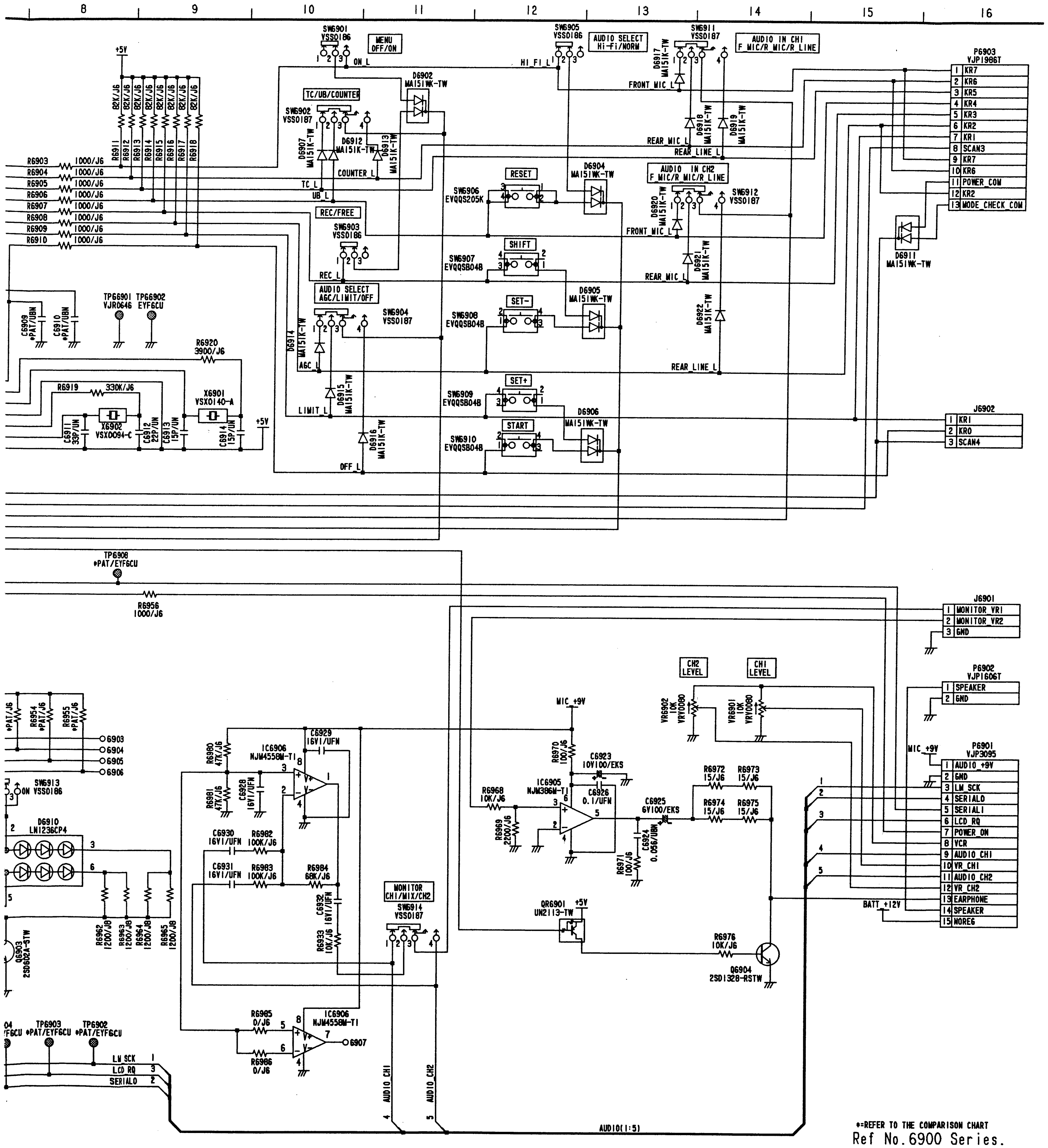
Note: D190-T ..... DOMESTIC MODEL
D190-PE... EXPORT MODEL

LCD SCHEMATIC DIAGRAM 1／1（E30:Page CBA-16）



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
J
LCD6901
ED0065Y88A4P
IC6901
D75308BGF132
IC6902
MN12821-RTX
OUT VDD VSS
R6901
100K/J6
R6902
470/J6
D6901
MA151K-TW
C6901
6V33/EKS
+5V
R6903 1000/J6
R6904 1000/J6
R6905 1000/J6
R6906 1000/J6
R6907 1000/J6
R6908 1000/J6
R6909 1000/J6
R6910 1000/J6
82K/J6
R6911
R6912
R6913
R6914
R6915
R6916
R6917
R6918
C6902
0.01/UBN
C6903
*PAT/UBN
C6904
*PAT/UBN
C6905
*PAT/UBN
C6906
*PAT/UBN
C6907
*PAT/UBN
C6908
*PAT/UBN
C6909
*PAT/UBN
C6910
*PAT/UBN
TP66901
VJR0646
TP66902
EYF6CU
R6920
3900/J6
R6919
330K/J6
X6901
VSX0140-A
X6902
VSX0094-C
C6911
39P/UN
C6912
22P/UN
C6913
15P/UN
C6914
15P/UN
SW6901
VSS0186
MENU
OFF/ON
ON_L
SW6902
VSS0187
TC/UB/COUNTER
D6907
MA151K-TW
D6912
MA151K-TW
D6913
MA151K-TW
D6902
MA151WK-TW
COUNTER_L
TC_L
UB_L
REC/FREE
SW6903
VSS0186
REC_L
AUDIO SELECT
AGC/LIMIT/OFF
SW6904
VSS0187
D6914
MA151K-TW
AGC_L
D6915
MA151K-TW
LIMIT_L
D6916
MA151K-TW
OFF_L
SW6905
VSS0186
AUDIO SELECT
Hi-FI/NORM
HI_FI_L
SW6906
EVQQS205K
RESET
SW6907
EVQQSB04B
SHIFT
SW6908
EVQQSB04B
SET-
SW6909
EVQQSB04B
SET+
SW6910
EVQQSB04B
START
D6904
MA151WK-TW
D6905
MA151WK-TW
D6906
MA151WK-TW
SW6911
VSS0187
AUDIO IN CH1
F_MIC/R_MIC/R_LINE
D6917
MA151K-TW
FRONT_MIC_L
D6918
MA151K-TW
D6919
MA151K-TW
REAR_MIC_L
REAR_LINE_L
AUDIO IN CH2
F_MIC/R_MIC/R_LINE
SW6912
VSS0187
D6920
MA151K-TW
D6921
MA151K-TW
D6922
MA151K-TW
D6911
MA151WK-TW
P6903
VJP1986T
1 KR7
2 KR6
3 KR5
4 KR4
5 KR3
6 KR2
7 KR1
8 SCAN3
9 KR7
10 KR6
11 POWER_COM
12 KR2
13 MODE_CHECK_COM
J6902
1 KR1
2 KR0
3 SCAN4
SCAN4
SCAN3
SCAN2
SCAN1
SCAN0
S11 S10 S9 S8 S7 S6 S5 S4 S3 S2 S1 S0
RESET_L
KR7 KR6 KR5 KR4 KR3 KR2 KR1 KR0
X2 X1 NC(VPP) XT2 XT1 VDD
P33 P32 P31 P30 P23 P22 P21 P20
P13/TI0
P12/INT2
P11/INT1
P10/INTO
SI
S12 S13 S14 S15 S16 S17 S18 S19 S20 S21 S22 S23 S24 S25 S26 S27 S28 S29 S30 S31
COM0 COM1 COM2 COM3
BIAS VLC0 VLC1 VLC2 P40 P41 P42 P43 VSS P50 P51 P52 P53 INT4 SCK_L SO
TP6908
*PAT/EYF6CU
R6956
1000/J6
BATT_HIGH_L
J6901
1 MONITOR_VR1
2 MONITOR_VR2
3 GND
D6923
MA167
D6924
MA167
IC6903
S81350HG
Q6901
2SD968-RSTW
Q6902
2SD968-RSTW
BATT_+12V
R6926
22K/J8
C6915
25V22/EKS
IC6907
*PAT/S81350HGKDT1
IN GND OUT
D6908
HZ16-1L
TP6901
*PAT/EYF6CU
C6916
6V47/EKS
C6927
0.1/UBN
R6935
22K/J6
R6936
22K/J6
R6937
22K/J6
C6919
0.1/UBN
C6920
0.1/UBN
R6925
100/J6
R6924
10K/J6
R6952
*PAT/J6
R6953
*PAT/J6
R6954
*PAT/J6
R6955
*PAT/J6
6903
6904
6905
6906
TP6905
VJR0646
TP6906
EYF6CU
R6938
100K/J6
R6939
10K/J6
TP6907
EYF6CU
R6940
100K/J6
R6941
10K/J6
LCD ON
SR6901
*PAT
R6942
100K/J6
R6943
10K/J6
C6921
0.01/UBN
R6944
*PAT/J6
R6945
0/J6
R6959
0/J6
6902
LIGHT
OFF ON
SW6913
VSS0186
D6910
LN1236CP4
R6957
1200/J8
R6958
1200/J8
R6960
1200/J8
R6961
1200/J8
R6966
3300/J6
R6967
22K/J6
Q6903
2SD602A-RTW
R6962
1200/J8
R6963
1200/J8
R6964
1200/J8
R6965
1200/J8
D6909
MA151K-TW
R6929
56K/J66
R6930
4700/J66
R6927
300K/J66
R6928
47K/J66
R6931
56K/J66
C6917
16V1/UFN
R6932
1.5M/J66
R6934
100K/J6
C6918
0.1/UFN
IC6904
NJU7112AM-T1
R6977
0/J6
R6978
0/J6
6901
R6979
*PAT/J6
R6949 100/J6
R6950 1000/J6
R6951 100/J6
LM SCK
LCD RQ
SERIAL0
R6948
100K/J6
R6947
100K/J6
R6946
100K/J6
TP6904
*PAT/EYF6CU
TP6903
*PAT/EYF6CU
TP6902
*PAT/EYF6CU
R6980
47K/J6
R6981
47K/J6
C6928
16V1/UFN
C6929
16V1/UFN
IC6906
NJM4558M-T1
C6930
16V1/UFN
R6982
100K/J6
C6931
16V1/UFN
R6983
100K/J6
R6984
68K/J6
C6932
16V1/UFN
R6933
10K/J6
R6985
0/J6
R6986
0/J6
6907
MONITOR
CH1/MIX/CH2
SW6914
VSS0187
AUDIO_CH1
AUDIO_CH2
AUDIO(1:5)
MIC_+9V
R6970
100/J6
C6923
10V100/EKS
IC6905
NJM386M-T1
C6926
0.1/UFN
R6968
10K/J6
R6969
2200/J6
C6925
6V100/EKS
C6924
0.056/UBN
R6971
100/J6
CH2
LEVEL
CH1
LEVEL
VR6902
10K
VRY0080
VR6901
10K
VRY0080
R6972
15/J6
R6973
15/J6
R6974
15/J6
R6975
15/J6
QR6901
UN2113-TW
R6976
10K/J6
Q6904
2SD1328-RSTW
P6902
VJP1606T
1 SPEAKER
2 GND
P6901
VJP3095
1 AUDIO_+9V
2 GND
3 LM_SCK
4 SERIAL0
5 SERIAL1
6 LCD RQ
7 POWER_ON
8 VCR
9 AUDIO_CH1
10 VR_CH1
11 AUDIO_CH2
12 VR_CH2
13 EARPHONE
14 SPEAKER
15 NORE6

*=REFER TO THE COMPARISON CHART
Ref No.6900 Series.


8
9
10
11
12
13
14
15
16
SW6901 VSS0186
MENU OFF/ON
ON_L
SW6905 VSS0186
AUDIO SELECT Hi-Fi/NORM
HI_FI_L
SW6911 VSS0187
AUDIO IN CH1 F_MIC/R_MIC/R_LINE
P6903 VJP1986T
1 KR7
2 KR6
3 KR5
4 KR4
5 KR3
6 KR2
7 KR1
8 SCAN3
9 KR7
10 KR6
11 POWER_COM
12 KR2
13 MODE_CHECK_COM
+5V
82K/J6
R6911
R6912
R6913
R6914
R6915
R6916
R6917
R6918
D6902 MA151WK-TW
TC/UB/COUNTER
SW6902 VSS0187
D6907 MA151K-TW
D6912 MA151K-TW
D6913 MA151K-TW
COUNTER_L
TC_L
UB_L
D6917 MA151K-TW
FRONT_MIC_L
D6918 MA151K-TW
D6919 MA151K-TW
REAR_MIC_L
REAR_LINE_L
R6903 1000/J6
R6904 1000/J6
R6905 1000/J6
R6906 1000/J6
R6907 1000/J6
R6908 1000/J6
R6909 1000/J6
R6910 1000/J6
RESET
SW6906 EVQQS205K
D6904 MA151WK-TW
AUDIO IN CH2 F_MIC/R_MIC/R_LINE
SW6912 VSS0187
D6920 MA151K-TW
REC/FREE
SW6903 VSS0186
SHIFT
SW6907 EVQQSB04B
D6921 MA151K-TW
D6911 MA151WK-TW
REC_L
AUDIO SELECT AGC/LIMIT/OFF
SW6904 VSS0187
SET-
SW6908 EVQQSB04B
D6905 MA151WK-TW
D6922 MA151K-TW
C6909 *PAT/UBN
C6910 *PAT/UBN
TPG6901 VJR0646
TPG6902 EYF6CU
R6920 3900/J6
D6914 MA151K-TW
AGC_L
REAR_LINE_L
R6919 330K/J6
X6901 VSX0140-A
D6915 MA151K-TW
SET+
SW6909 EVQQSB04B
J6902
1 KR1
2 KR0
3 SCAN4
X6902 VSX0094-C
C6911 33P/UN
C6912 22P/UN
C6913 15P/UN
C6914 15P/UN
LIMIT_L
START
SW6910 EVQQSB04B
D6906 MA151WK-TW
D6916 MA151K-TW
OFF_L
TP6908 *PAT/EYF6CU
R6956 1000/J6
J6901
1 MONITOR_VR1
2 MONITOR_VR2
3 GND
CH2 LEVEL
CH1 LEVEL
P6902 VJP1606T
1 SPEAKER
2 GND
VR6902 10K VRV0080
VR6901 10K VRV0080
MIC_+9V
*PAT/J6
R6954 *PAT/J6
R6955 *PAT/J6
6903
6904
6905
6906
R6980 47K/J6
IC6906 NJM4558M-T1
C6929 16V1/UFN
R6981 47K/J6
C6928 16V1/UFN
R6970 100/J6
C6923 10V100/EKS
IC6905 NJM386M-T1
R6968 10K/J6
C6926 0.1/UFN
R6969 2200/J6
C6925 6V100/EKS
C6924 0.056/UBN
R6971 100/J6
R6972 15/J6
R6973 15/J6
R6974 15/J6
R6975 15/J6
P6901 VJP3095
1 AUDIO_+9V
2 GND
3 LM_SCK
4 SERIAL0
5 SERIAL1
6 LCD_RQ
7 POWER_ON
8 VCR
9 AUDIO_CH1
10 VR_CH1
11 AUDIO_CH2
12 VR_CH2
13 EARPHONE
14 SPEAKER
15 NOREG
BATT_+12V
SW6913 ON VSS0186
D6910 LN1236CP4
C6930 16V1/UFN
R6982 100K/J6
C6931 16V1/UFN
R6983 100K/J6
R6984 68K/J6
C6932 16V1/UFN
R6933 10K/J6
MONITOR CH1/MIX/CH2
SW6914 VSS0187
QR6901 UN2113-TW
R6976 10K/J6
Q6904 2SD1328-RSTW
R6962 1200/J8
R6963 1200/J8
R6964 1200/J8
R6965 1200/J8
Q6903 2SD602A-STW
R6985 0/J6
R6986 0/J6
IC6906 NJM4558M-T1
6907
TP6903 *PAT/EYF6CU
TP6902 *PAT/EYF6CU
LM SCK
LCD RQ
SERIAL0
AUDIO_CH1
AUDIO_CH2
AUDIO(1:5)

*=REFER TO THE COMPARISON CHART

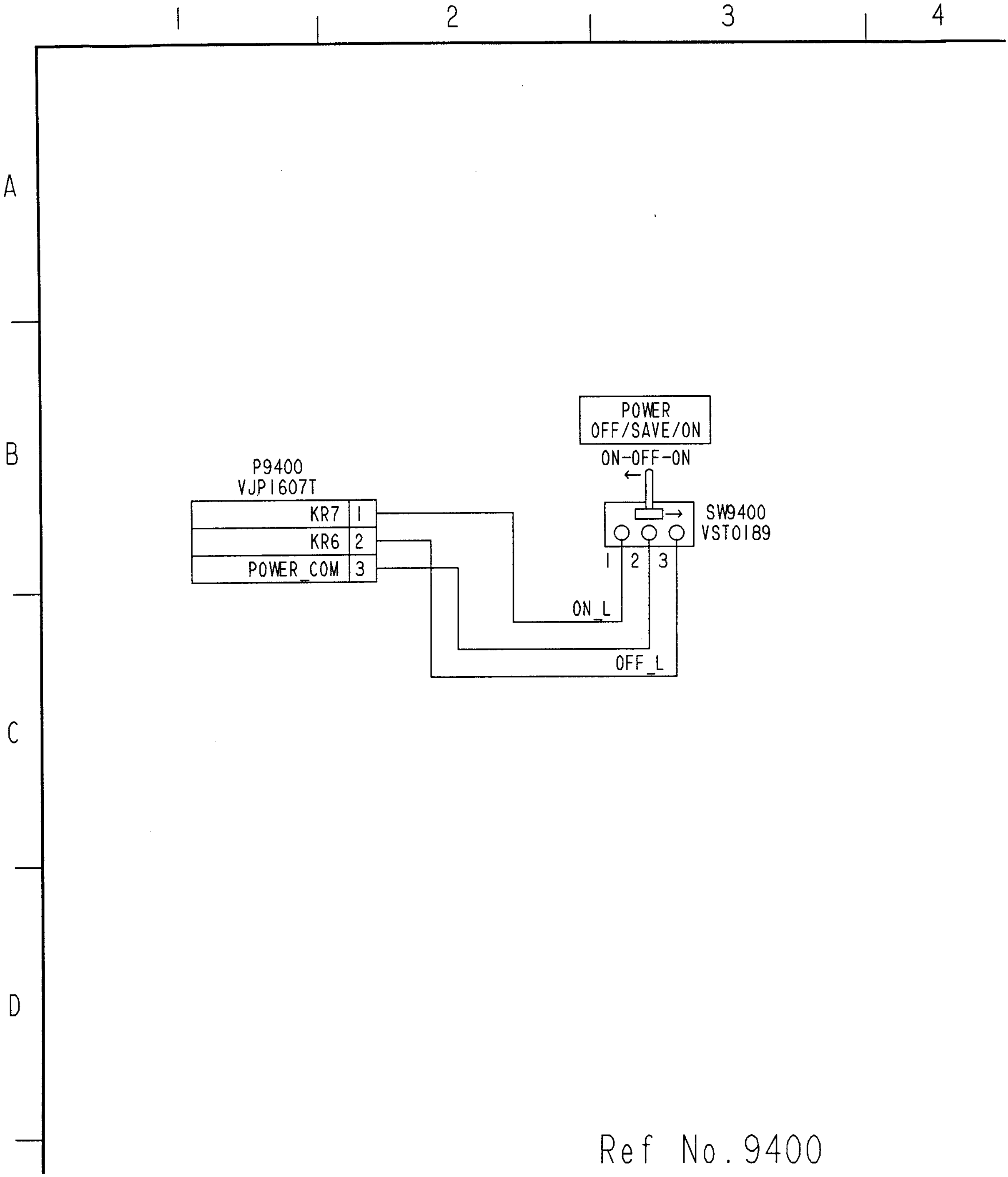
Ref No.6900 Series.

LCD COMPARISON CHART
(E30:Page CBA-16)

==================================

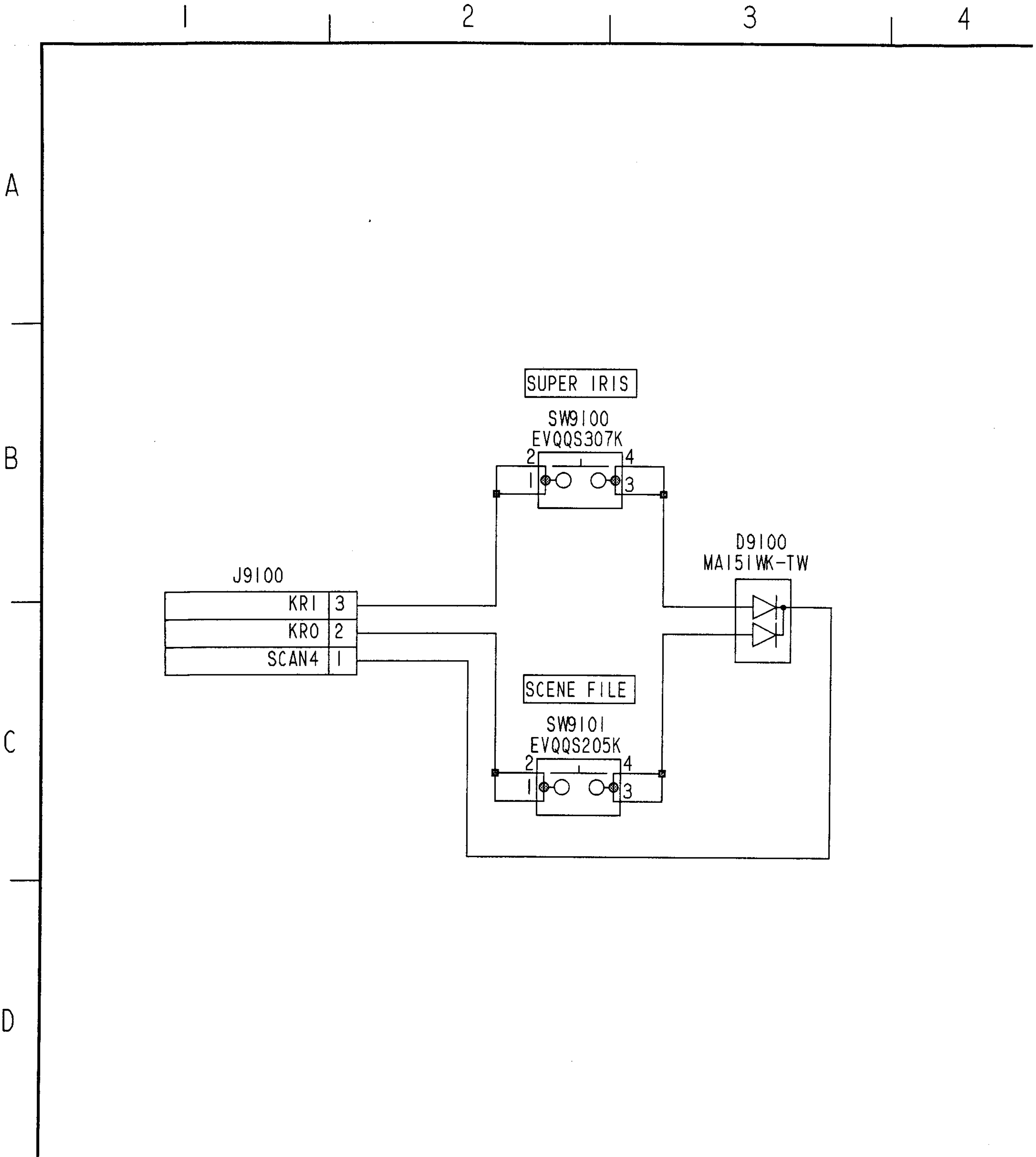
REF	NTSC	PAL
C6903	*PAT/UBN	*PAT/UBN
C6904	*PAT/UBN	*PAT/UBN
C6905	*PAT/UBN	*PAT/UBN
C6906	*PAT/UBN	*PAT/UBN
C6907	*PAT/UBN	*PAT/UBN
C6908	*PAT/UBN	*PAT/UBN
C6909	*PAT/UBN	*PAT/UBN
C6910	*PAT/UBN	*PAT/UBN
IC6907	*PAT	*PAT
R6944	*PAT/J6	*PAT/J6
R6952	*PAT/J6	*PAT/J6
R6953	*PAT/J6	*PAT/J6
R6954	*PAT/J6	*PAT/J6
R6955	*PAT/J6	*PAT/J6
R6979	*PAT/J6	*PAT/J6
SR6901	*PAT	*PAT
TP6901	*PAT	*PAT
TP6902	*PAT	*PAT
TP6903	*PAT	*PAT
TP6904	*PAT	*PAT
TP6908	*PAT	*PAT

POWER SW SCHEMATIC DIAGRAM 1／1（E26:Page CBA-4）


1
2
3
4
A
B
C
D
POWER
OFF/SAVE/ON
ON-OFF-ON
P9400
VJP1607T
KR7 1
KR6 2
POWER_COM 3
SW9400
VST0189
1
2
3
ON_L
OFF_L

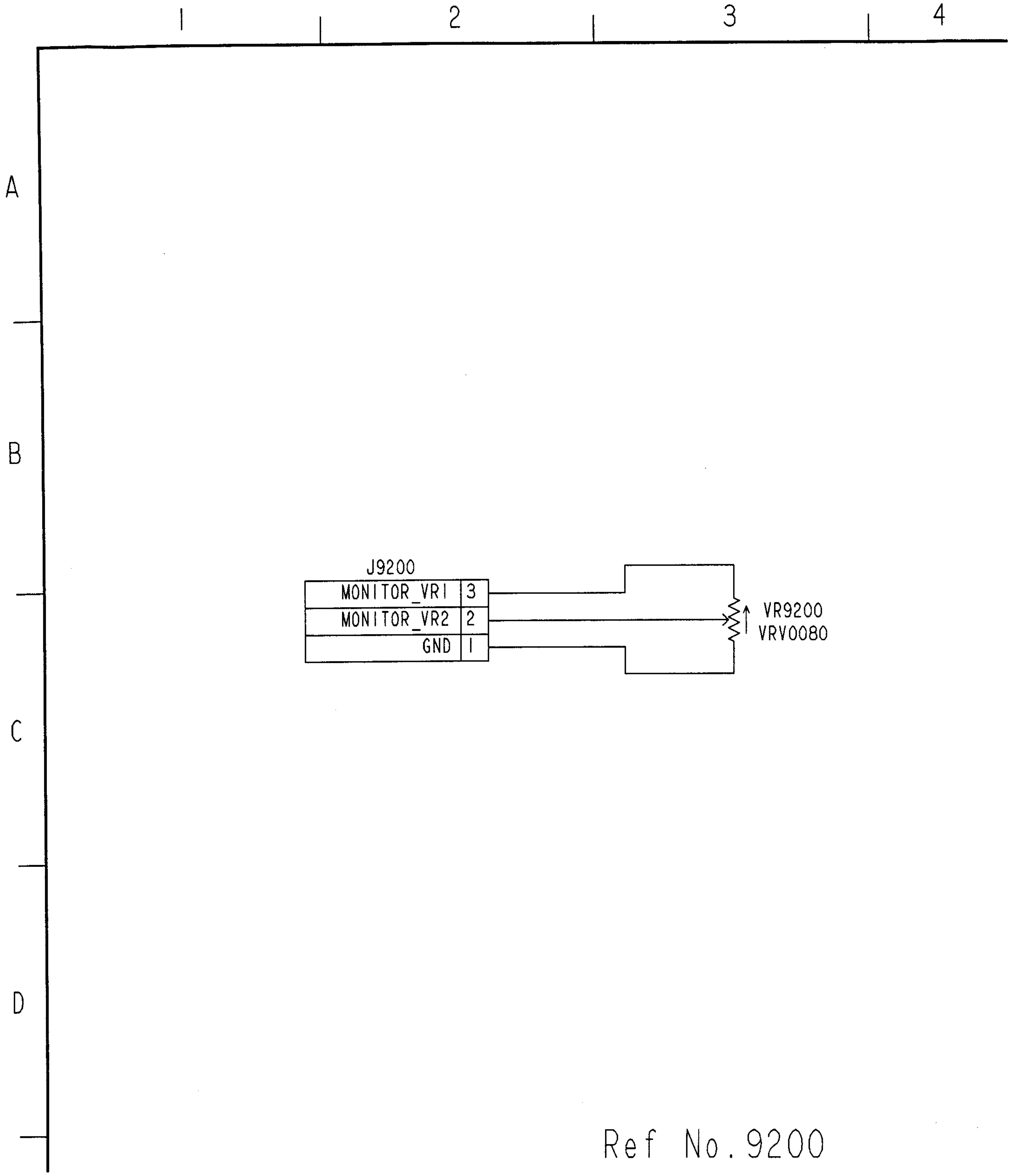
Ref No.9400

SUPER IRIS SCHEMATIC DIAGRAM 1／1 (E27:Page CBA-5)


1
2
3
4
A
B
C
D
SUPER IRIS
SW9100
EVQQS307K
2
4
1
3
D9100
MA151WK-TW
J9100
KR1
3
KR0
2
SCAN4
1
SCENE FILE
SW9101
EVQQS205K
2
4
1
3

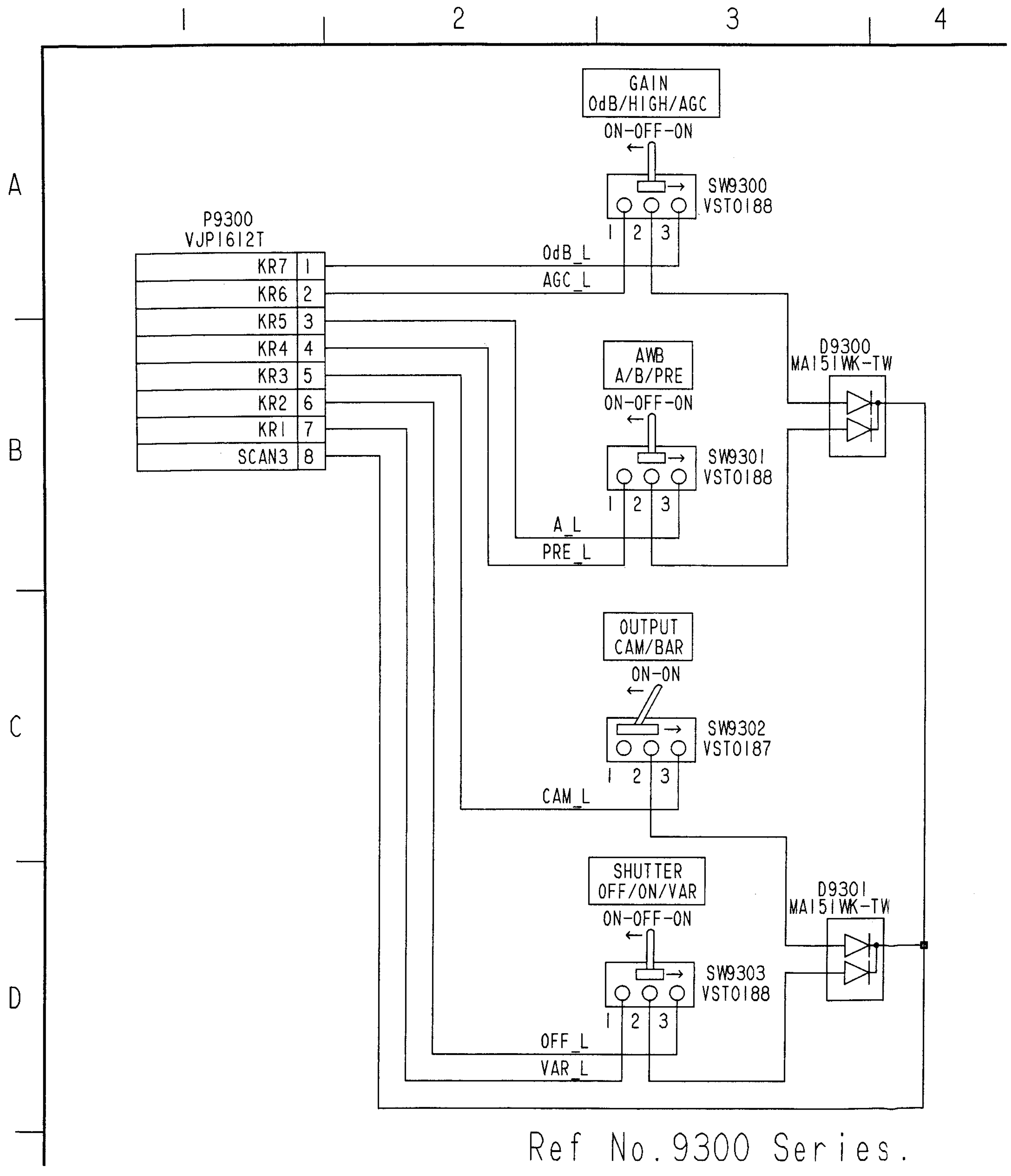
Ref No.9100 Series.

MONITOR VR SCHEMATIC DIAGRAM 1／1 (E28:Page CBA-4)

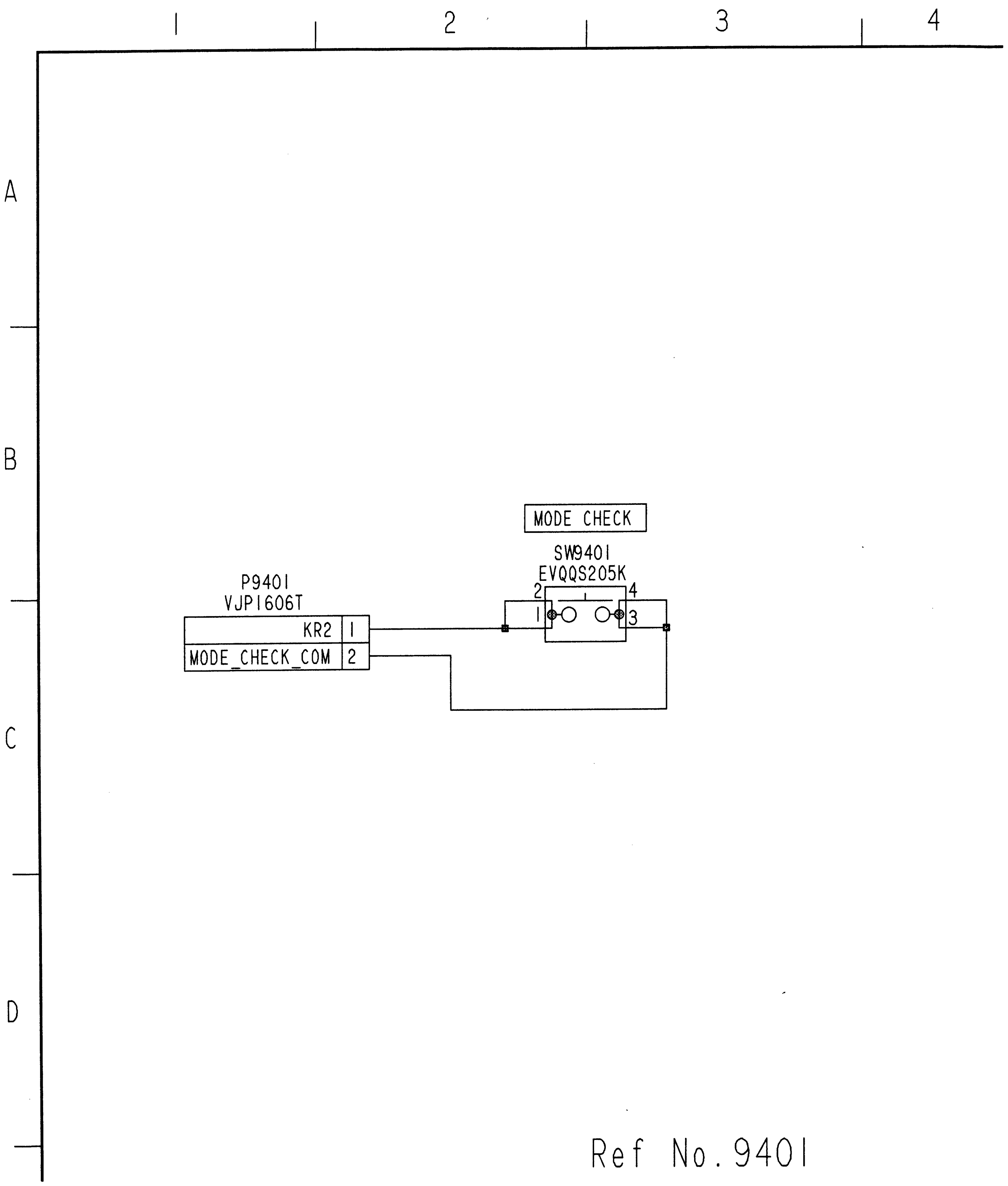

1
2
3
4
A
B
C
D
J9200
MONITOR_VR1
MONITOR_VR2
GND
3
2
1
VR9200
VRV0080

Ref No.9200

TOGGLE SW SCHEMATIC DIAGRAM 1／1 (E29:Page CBA-5)

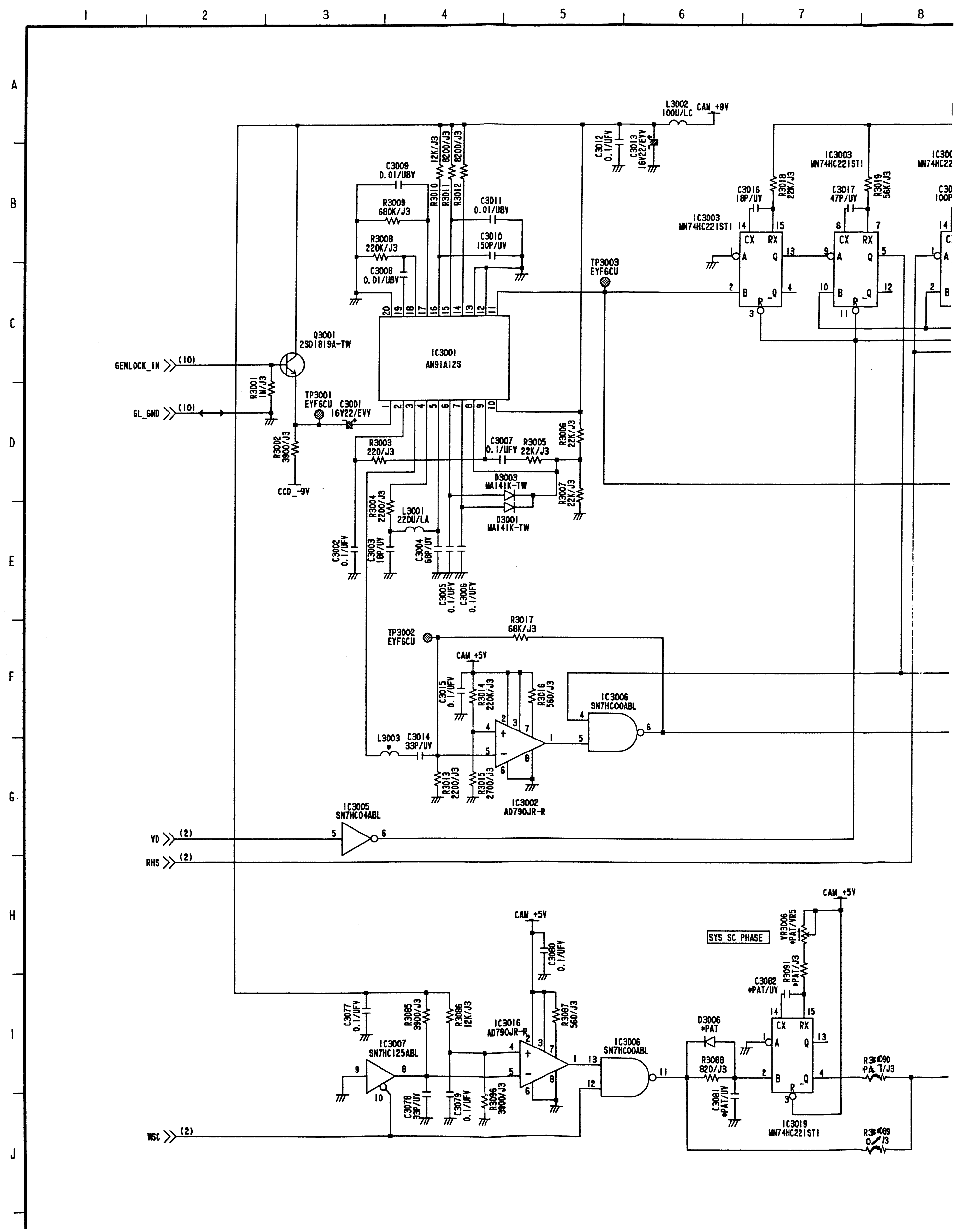

1
2
3
4
A
B
C
D
GAIN
0dB/HIGH/AGC
ON-OFF-ON
SW9300
VST0188
P9300
VJP1612T
KR7 1
KR6 2
KR5 3
KR4 4
KR3 5
KR2 6
KR1 7
SCAN3 8
0dB_L
AGC_L
AWB
A/B/PRE
ON-OFF-ON
SW9301
VST0188
A_L
PRE_L
D9300
MA151WK-TW
OUTPUT
CAM/BAR
ON-ON
SW9302
VST0187
CAM_L
SHUTTER
OFF/ON/VAR
ON-OFF-ON
SW9303
VST0188
D9301
MA151WK-TW
OFF_L
VAR_L
1 2 3
Ref No.9300 Series.

MODE CHECK SCHEMATIC DIAGRAM 1／1 (E25:Page CBA-4)

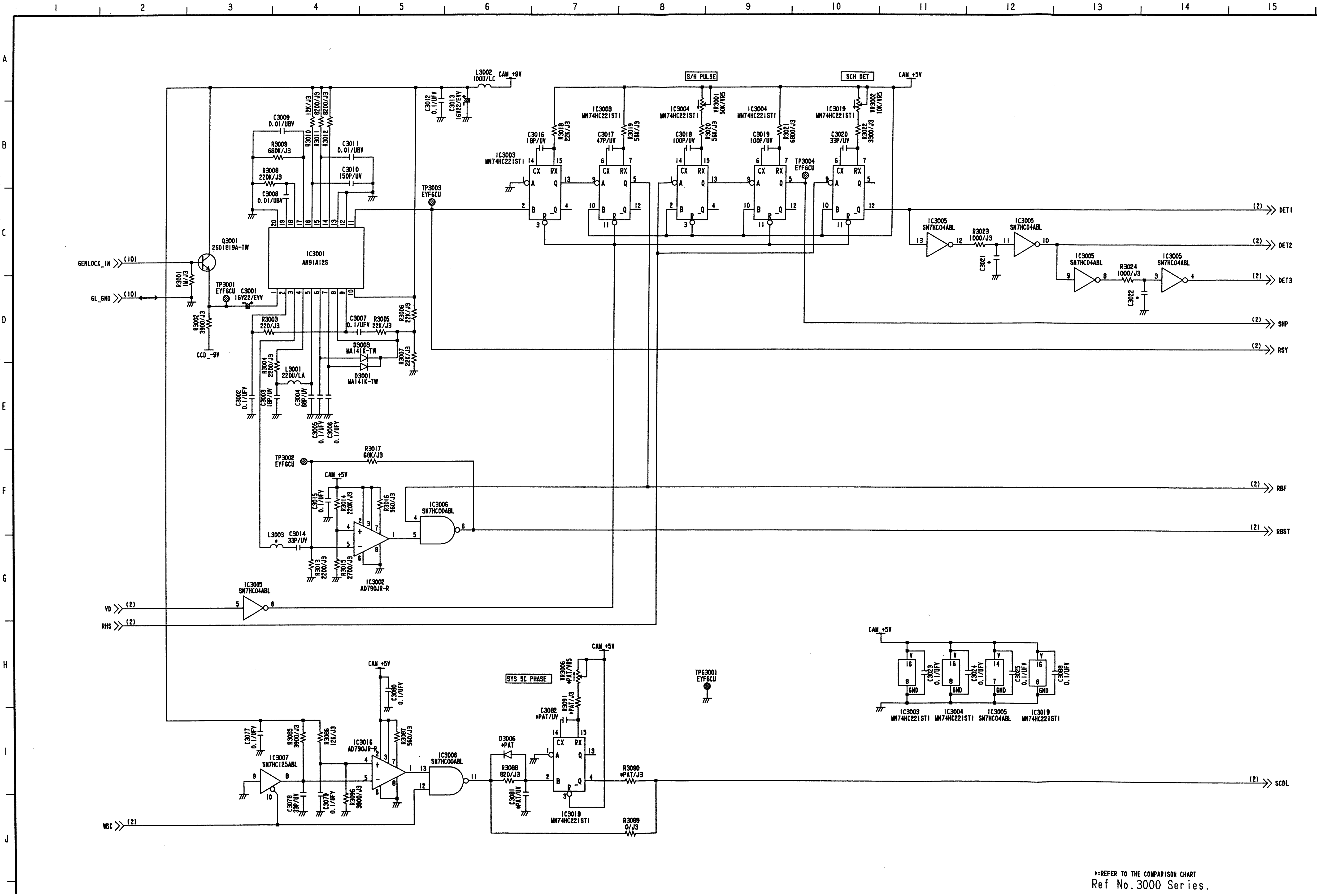

1
2
3
4
A
B
C
D
MODE CHECK
SW9401
EVQQS205K
P9401
VJP1606T
KR2
MODE_CHECK_COM
1
2
3
4

Ref No.9401

PROCESS SCHEMATIC DIAGRAM 1／12 (E15:Page CBA-10)


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
J
L3002
100U/LC
CAM_+9V
C3012
0.1/UFV
C3013
16V22/EVV
C3009
0.01/UBV
R3009
680K/J3
R3008
220K/J3
C3008
0.01/UBV
R3010
12K/J3
R3011
8200/J3
R3012
8200/J3
C3011
0.01/UBV
C3010
150P/UV
TP3003
EYF6CU
IC3001
AN91A12S
Q3001
2SD1819A-TW
GENLOCK_IN
(10)
GL_GND
(10)
R3001
1M/J3
TP3001
EYF6CU
C3001
16V22/EVV
R3002
3900/J3
CCD_-9V
R3003
220/J3
C3007
0.1/UFV
R3005
22K/J3
R3006
22K/J3
D3003
MA141K-TW
R3007
22K/J3
D3001
MA141K-TW
R3004
2200/J3
L3001
220U/LA
C3002
0.1/UFV
C3003
18P/UV
C3004
68P/UV
C3005
0.1/UFV
C3006
0.1/UFV
TP3002
EYF6CU
R3017
68K/J3
CAM_+5V
C3015
0.1/UFV
R3014
220K/J3
R3016
560/J3
IC3006
SN7HC00ABL
L3003
C3014
33P/UV
R3013
2200/J3
R3015
2700/J3
IC3002
AD790JR-R
IC3005
SN7HC04ABL
VD
(2)
RHS
(2)
C3016
18P/UV
R3018
22K/J3
IC3003
MN74HC221STI
C3017
47P/UV
R3019
56K/J3
CX
RX
A
B
Q
CAM_+5V
C3080
0.1/UFV
C3077
0.1/UFV
R3085
3900/J3
R3086
12K/J3
IC3016
AD790JR-R
R3087
560/J3
IC3006
SN7HC00ABL
IC3007
SN7HC125ABL
C3078
33P/UV
C3079
0.1/UFV
R3096
3900/J3
WSC
(2)
SYS SC PHASE
VR3006
*PAT/VR5
R3091
*PAT/J3
C3082
*PAT/UV
D3006
*PAT
R3088
820/J3
C3081
*PAT/UV
IC3019
MN74HC221STI
R3090
*PAT/J3
R3089
0/J3
CAM_+5V

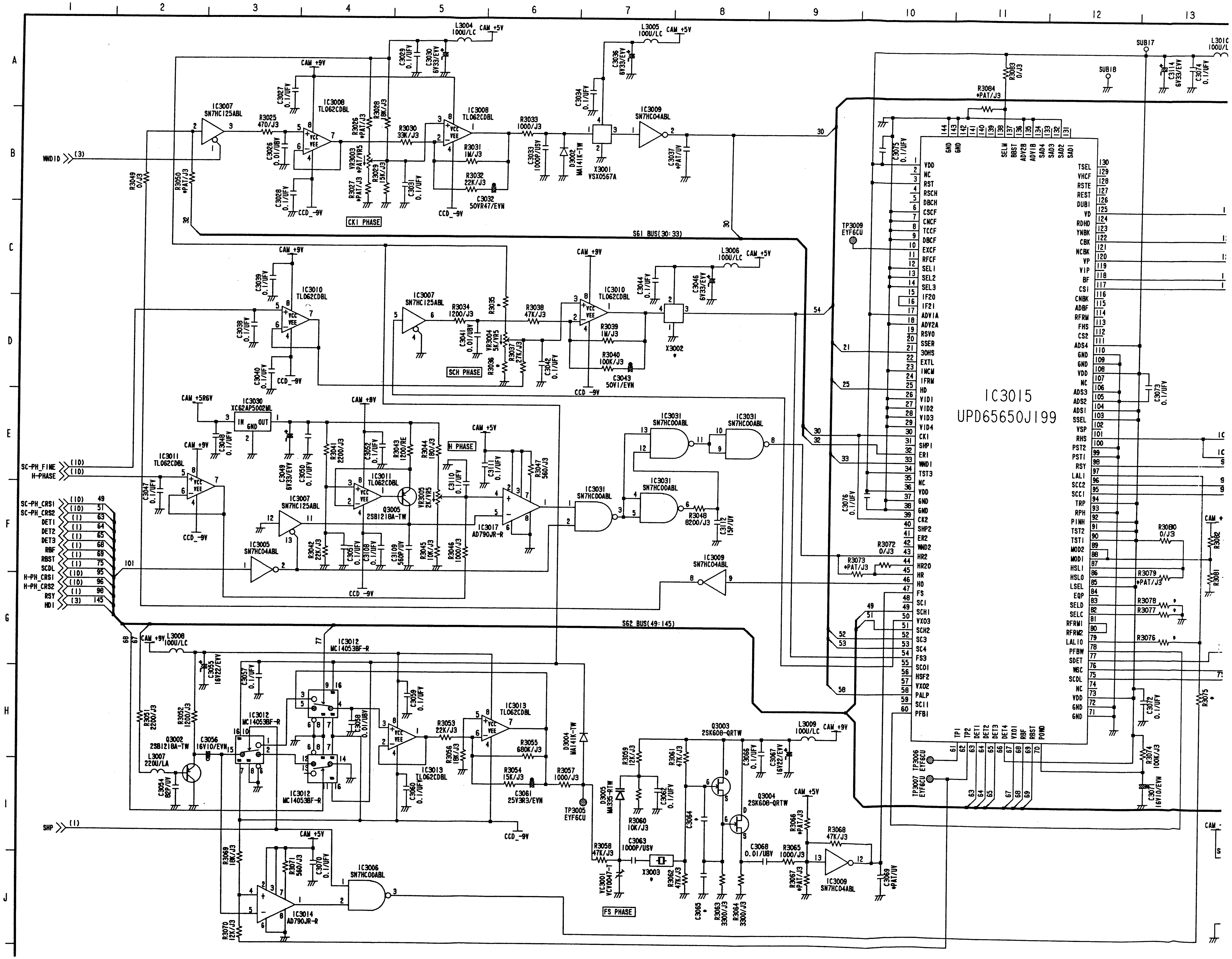
PROCESS SCHEMATIC DIAGRAM 1／12 (E15:Page CBA-10)


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J
GENLOCK_IN (10)
GL_GND (10)
Q3001
2SD1819A-TW
R3001
1M/J3
R3002
3900/J3
CCD_-9V
TP3001
EYF6CU
C3001
16V22/EVV
IC3001
AN91A12S
C3009
0.01/UBV
R3009
680K/J3
R3008
220K/J3
C3008
0.01/UBV
R3010
12K/J3
R3011
8200/J3
R3012
8200/J3
C3011
0.01/UBV
C3010
150P/UV
L3002
100U/LC
CAM_+9V
C3012
0.1/UFV
C3013
16V22/EVV
TP3003
EYF6CU
R3003
220/J3
C3007
0.1/UFV
R3005
22K/J3
R3006
22K/J3
R3007
22K/J3
D3003
MA141K-TW
D3001
MA141K-TW
R3004
2200/J3
L3001
220U/LA
C3002
0.1/UFV
C3003
18P/UV
C3004
68P/UV
C3005
0.1/UFV
C3006
0.1/UFV
S/H PULSE
SCH DET
CAM_+5V
IC3003
MN74HC221STI
C3016
18P/UV
R3018
22K/J3
C3017
47P/UV
R3019
56K/J3
IC3004
MN74HC221STI
VR3001
50K/VR5
C3018
100P/UV
R3020
56K/J3
C3019
100P/UV
R3021
6800/J3
TP3004
EYF6CU
IC3019
MN74HC221STI
VR3002
10K/VR5
C3020
33P/UV
R3022
3300/J3
CX
RX
A
B
Q
_Q
R
IC3005
SN7HC04ABL
R3023
1000/J3
C3021
*
R3024
1000/J3
C3022
*
(2) DET1
(2) DET2
(2) DET3
(2) SHP
(2) RSY
TP3002
EYF6CU
R3017
68K/J3
CAM_+5V
C3015
0.1/UFV
R3014
220K/J3
R3016
560/J3
L3003
*
C3014
33P/UV
R3013
2200/J3
R3015
2700/J3
IC3002
AD790JR-R
IC3006
SN7HC00ABL
(2) RBF
(2) RBST
IC3005
SN7HC04ABL
VD (2)
RHS (2)
CAM_+5V
C3080
0.1/UFV
C3077
0.1/UFV
R3085
3900/J3
R3086
12K/J3
IC3016
AD790JR-R
R3087
560/J3
IC3007
SN7HC125ABL
C3078
33P/UV
C3079
0.1/UFV
R3096
3900/J3
IC3006
SN7HC00ABL
WSC (2)
SYS SC PHASE
VR3006
*PAT/VR5
R3091
*PAT/J3
C3082
*PAT/UV
D3006
*PAT
R3088
820/J3
C3081
*PAT/UV
IC3019
MN74HC221STI
R3090
*PAT/J3
R3089
0/J3
(2) SCDL
TP63001
EYF6CU
CAM_+5V
V
GND
C3023
0.1/UFV
C3024
0.1/UFV
C3025
0.1/UFV
C3088
0.1/UFV
IC3003
MN74HC221STI
IC3004
MN74HC221STI
IC3005
SN7HC04ABL
IC3019
MN74HC221STI

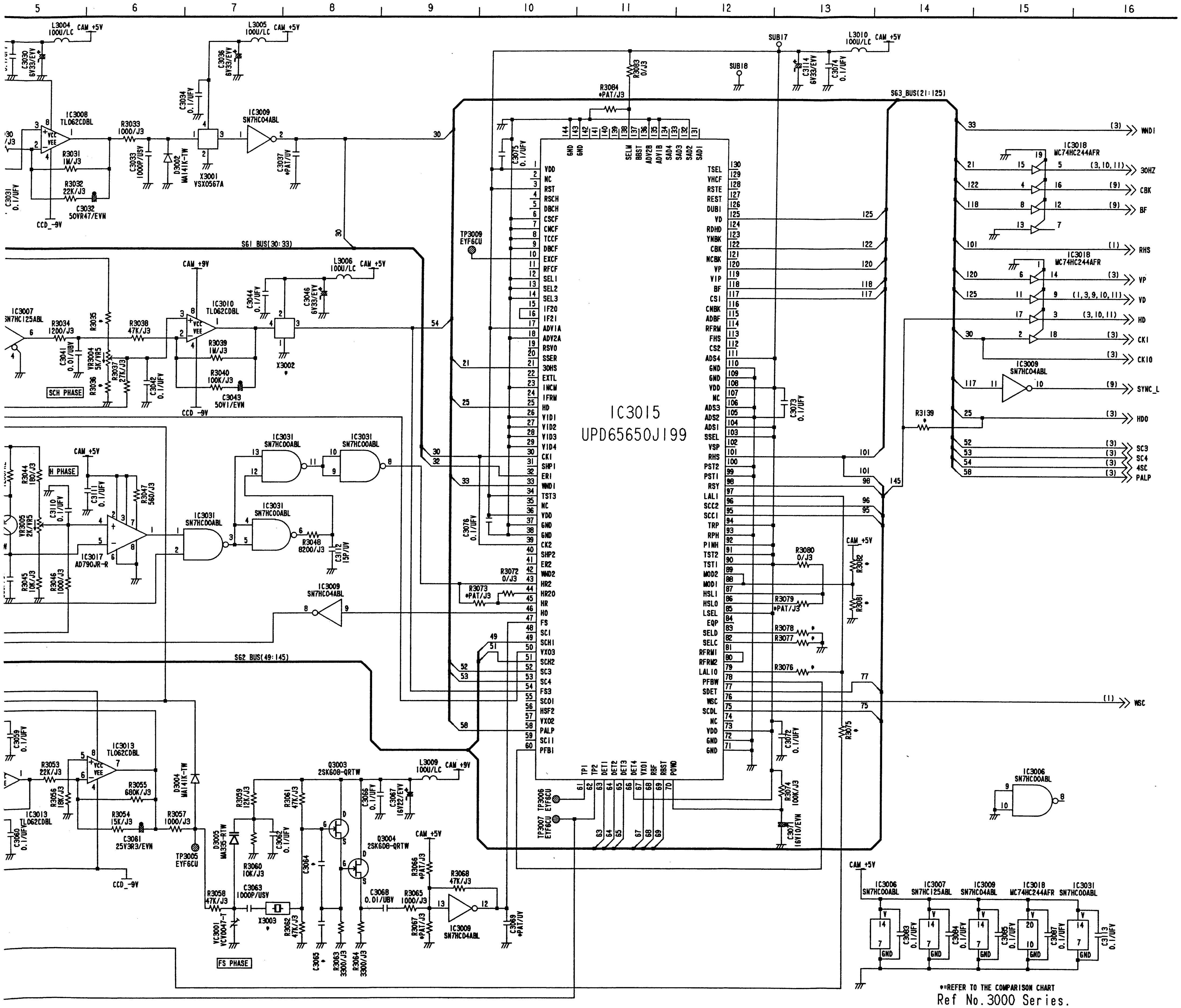
*=REFER TO THE COMPARISON CHART

Ref No.3000 Series.

PROCESS SCHEMATIC DIAGRAM 2／12（E15:Page CBA-10） PROCESS S


1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I
J
IC3007 SN7HC125ABL
IC3008 TL062CDBL
IC3009 SN7HC04ABL
IC3010 TL062CDBL
IC3011 TL062CDBL
IC3030 XC62AP5002ML
IC3005 SN7HC04ABL
IC3017 AD790JR-R
IC3031 SN7HC00ABL
IC3012 MC14053BF-R
IC3013 TL062CDBL
IC3014 AD790JR-R
IC3006 SN7HC00ABL
IC3015
UPD65650J199
X3001 VSX0567A
X3002
X3003
Q3002 2SB1218A-TW
Q3003 2SK608-QRTW
Q3004 2SK608-QRTW
Q3005 2SB1218A-TW
D3002 MA141K-TW
D3004 MA141K-TW
D3005 MA335-RTW
VC3001 VCV0047-T
L3004 100U/LC
L3005 100U/LC
L3006 100U/LC
L3007 220U/LA
L3008 100U/LC
L3009 100U/LC
CAM +9V
CAM +5V
CAM -9V
CAM +5R6V
CCD -9V
CKI PHASE
SCH PHASE
H PHASE
FS PHASE
S61 BUS(30:33)
S62 BUS(49:145)
WHDID
SC-PH_FINE
H-PHASE
SC-PH_CRS1
SC-PH_CRS2
DET1
DET2
DET3
RBF
RBST
SCDL
H-PH_CRS1
H-PH_CRS2
RSY
HDI
SHP
TP3005 EYF6CU
TP3006 EYF6CU
TP3007 EYF6CU
TP3009 EYF6CU
SUB17
SUB18

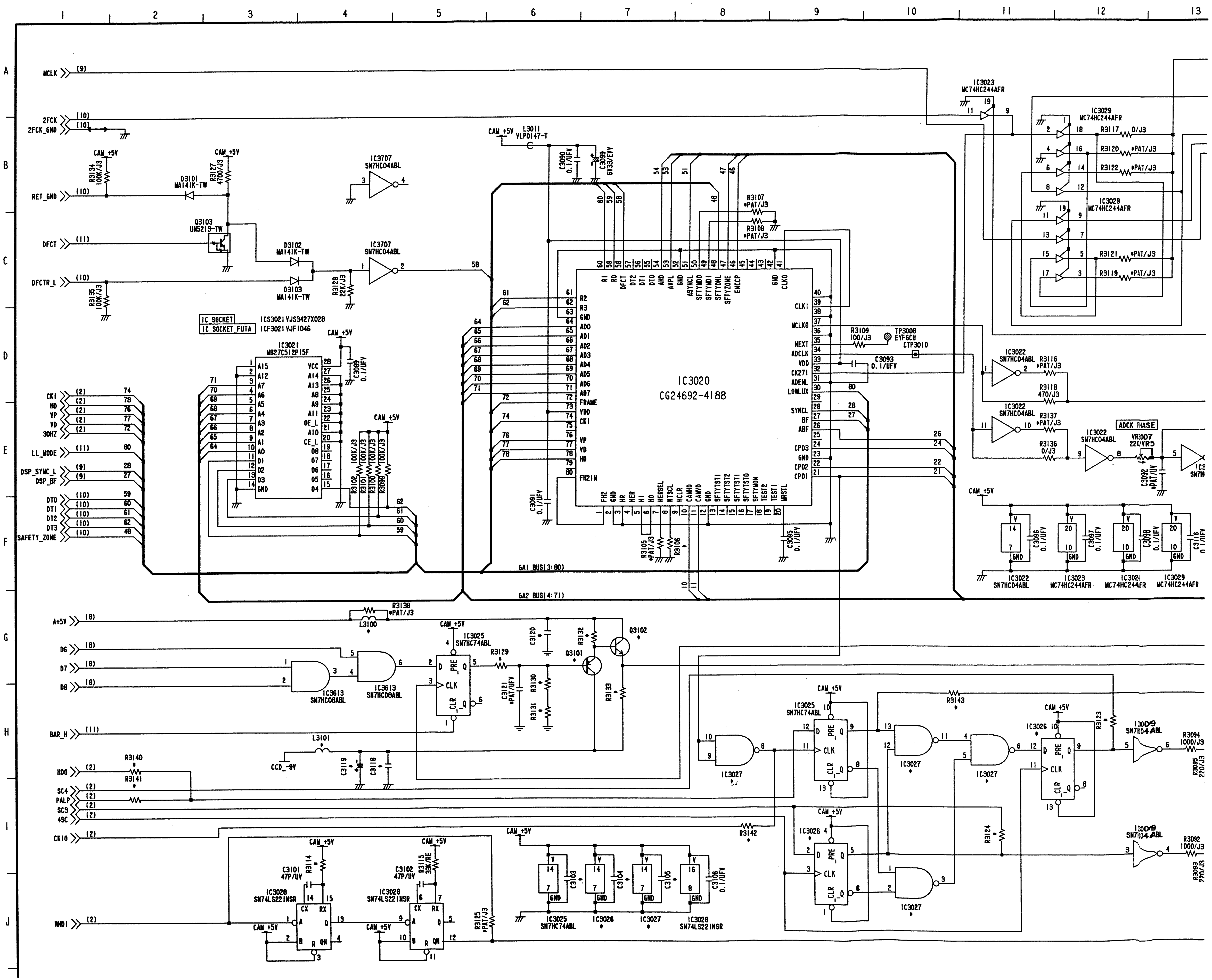
(E15:Page CBA-10) PROCESS S

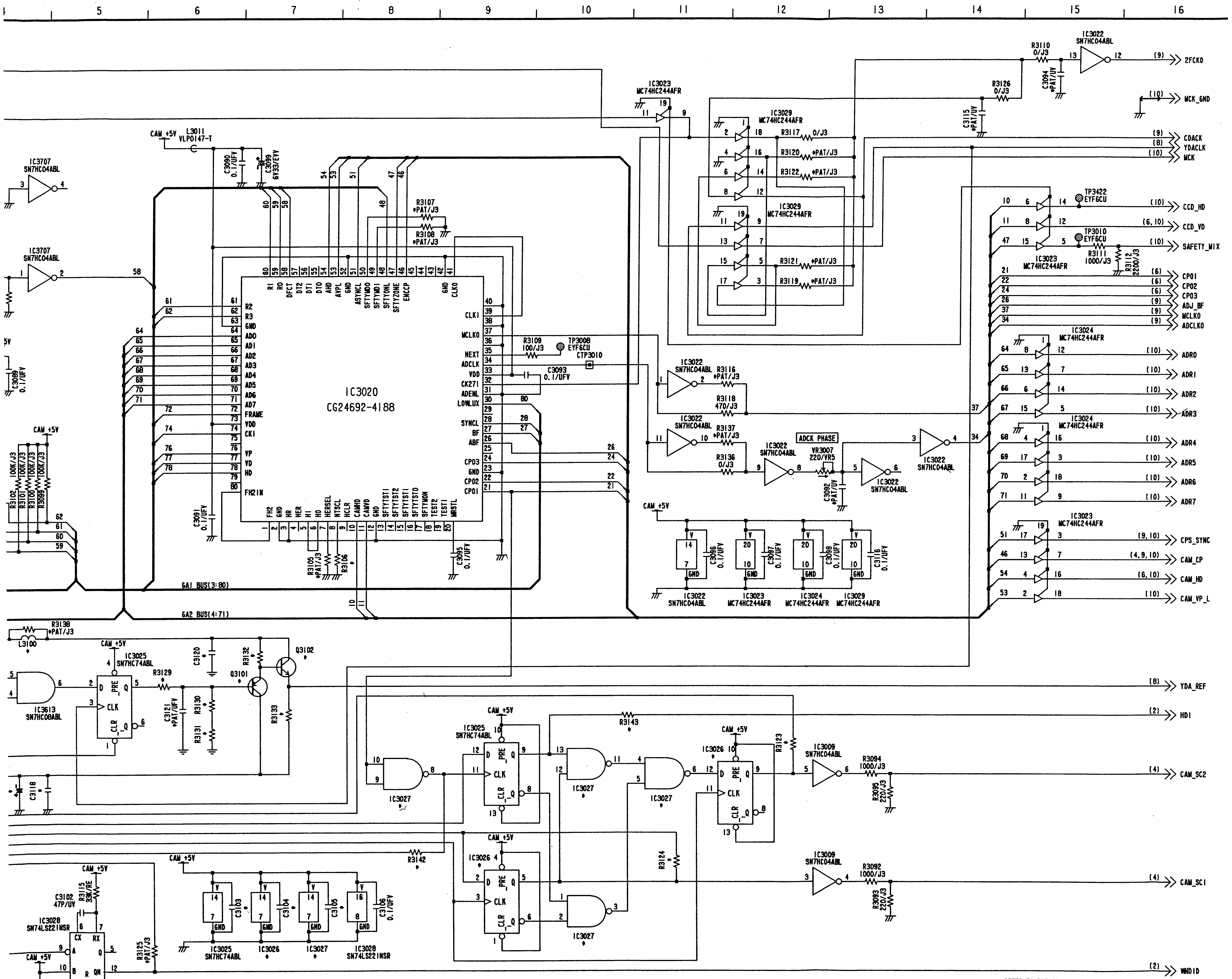

5
6
7
8
9
10
11
12
13
14
15
16
L3004 100U/LC CAM +5V
C3030 6V33/EVV
IC3008 TL062CDBL
R3033 1000/J3
R3031 1M/J3
R3032 22K/J3
C3032 50VR47/EVN
C3031 0.1/UFV
CCD -9V
L3005 100U/LC CAM +5V
C3036 6V33/EVV
C3034 0.1/UFV
C3033 1000P/USV
D3002 MA141K-TW
X3001 VSX0567A
IC3009 SN74HC04ABL
C3037 *PAT/UV
S61 BUS(30:33)
CAM +9V
L3006 100U/LC CAM +5V
C3044 0.1/UFV
C3046 6V33/EVV
IC3007 SN74HC125ABL
R3034 1200/J3
R3035
R3038 47K/J3
IC3010 TL062CDBL
R3039 1M/J3
R3040 100K/J3
C3043 50V1/EVN
X3002
C3041 0.01/UBV
VR3004 5K/YR5
R3037 27K/J3
R3036
C3042 0.1/UFV
SCH PHASE
CCD -9V
CAM +5V
H PHASE
R3044 180/J3
C3110 0.1/UFV
C3111 0.1/UFV
R3047 560/J3
VR3005 2K/YR5
IC3017 AD790JR-R
R3045 10K/J3
R3046 1000/J3
IC3031 SN74HC00ABL
R3048 8200/J3
C3112 15P/UV
S62 BUS(49:145)
C3059 0.1/UFV
IC3013 TL062CDBL
R3053 22K/J3
R3056 18K/J3
R3055 680K/J3
R3054 15K/J3
C3061 25V3R3/EVN
R3057 1000/J3
D3004 MA141K-TW
TP3005 EYF6CU
C3060 0.1/UFV
CCD -9V
Q3003 2SK608-QRTW
Q3004 2SK608-QRTW
L3009 100U/LC CAM +9V
C3066 0.1/UFV
C3067 16V22/EVV
R3059 12K/J3
R3061 47K/J3
C3062 0.1/UFV
D3005 MA335-RTW
R3060 10K/J3
C3063 1000P/USV
C3064
R3058 47K/J3
VC3001 VCV0047-T
X3003
R3062 47K/J3
C3065
R3063 3300/J3
R3064 3300/J3
FS PHASE
CAM +5V
R3066 *PAT/J3
R3068 47K/J3
C3068 0.01/UBV
R3065 1000/J3
R3067 *PAT/J3
IC3009 SN74HC04ABL
C3069 *PAT/UV
TP3009 EYF6CU
R3084 *PAT/J3
R3083 0/J3
C3075 0.1/UFV
C3076 0.1/UFV
R3072 0/J3
R3073 *PAT/J3
IC3015
UPD65650J199
VDD NC RST RSCH DBCH CSCF CNCF TCCF DBCF EXCF RFCF SEL1 SEL2 SEL3 IF20 IF21 ADY1A ADY2A RSYO SSER 30HS EXTL INCM IFRM HD VID1 VID2 VID3 VID4 CK1 SHP1 ER1 WND1 TST3 NC VDD GND GND CK2 SHP2 ER2 WND2 HR2 HR20 HR HO FS SC1 SCH1 VXO3 SCH2 SC3 SC4 FS3 SCO1 HSF2 VXO2 PALP SC11 PFB1
TP1 TP2 DET1 DET2 DET3 DET4 VXO1 RBF RBST POWD
GND GND SELM BBST ADV1B ADV1B SAD4 SAD3 SAD2 SAD1
TSEL VHCF RSTE REST DUB1 VD RDHD YNBK CBK NCBK VP VIP BF CS1 CNBK ADBF RFRM FHS CS2 ADS4 GND GND VDD NC ADS3 ADS2 ADS1 SSEL VSP RHS PST2 PST1 RSY LAL1 SCC2 SCC1 TRP RPH PINH TST2 TST1 MOD2 MOD1 HSL1 HSLO LSEL EQP SELD SELC RFRM1 RFRM2 LAL10 PFBW SDET WSC SCDL NC VDD GND GND
TP3006 EYF6CU
TP3007 EYF6CU
SUB17
SUB18
L3010 100U/LC CAM +5V
C3114 6V33/EVV
C3074 0.1/UFV
S63 BUS(21:125)
C3073 0.1/UFV
R3080 0/J3
R3079 *PAT/J3
R3078
R3077
R3076
R3082
R3081
R3075
C3072 0.1/UFV
R3074 100K/J3
C3071 16V10/EVN
CAM +5V
R3139
IC3018 MC74HC244AFR
IC3009 SN74HC04ABL
(3) WND1
(3,10,11) 30HZ
(9) CBK
(9) BF
(1) RHS
(3) VP
(1,3,9,10,11) VD
(3,10,11) HD
(3) CK1
(3) CK10
(9) SYNC_L
(3) HDO
(3) SC3
(3) SC4
(3) 4SC
(3) PALP
(1) WSC
IC3006 SN74HC00ABL
CAM +5V
IC3006 SN74HC00ABL
IC3007 SN74HC125ABL
IC3009 SN74HC04ABL
IC3018 MC74HC244AFR
IC3031 SN74HC00ABL
C3063 0.1/UFV
C3064 0.1/UFV
C3065 0.1/UFV
C3087 0.1/UFV
C3113 0.1/UFV
V
GND

*=REFER TO THE COMPARISON CHART

Ref No.3000 Series.

CHEMATIC DIAGRAM 3／12（E15:Page CBA-10）

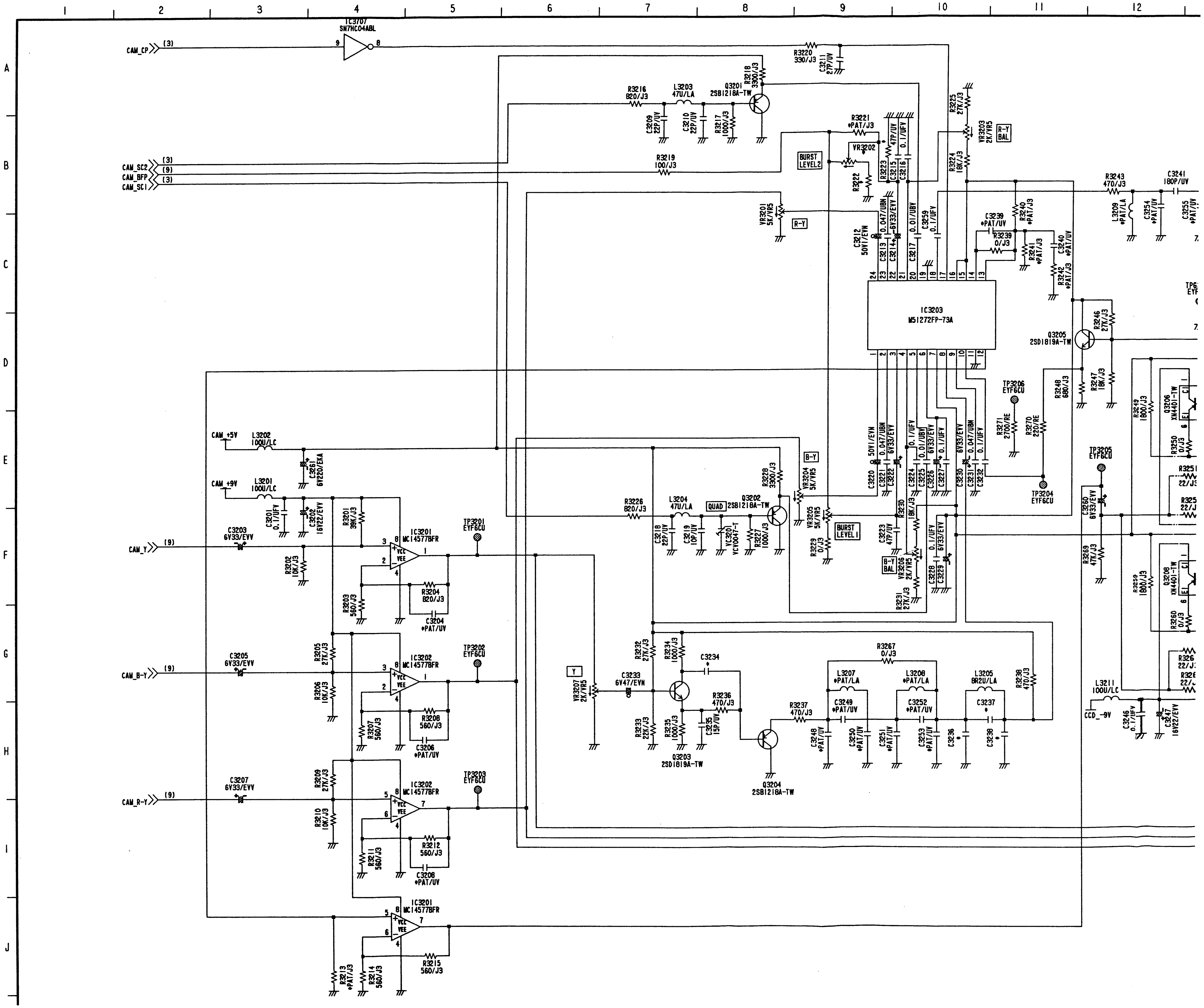

1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I
J
MCLK
2FCK
2FCK_GND
RET_GND
DFCT
DFCTR_L
CKI
HD
VP
VD
30HZ
LL_MODE
DSP_SYNC_L
DSP_BF
DT0
DT1
DT2
DT3
SAFETY_ZONE
A+5V
D6
D7
D8
BAR_H
HD0
SC4
PALP
SC3
4SC
CK10
WHD1
CCD_-9V
CAM_+5V
IC SOCKET
IC SOCKET_FUTA
ICS3021 VJS3427X028
ICF3021 VJF1046
IC3021
MB27C512P15F
IC3020
CG24692-4188
IC3707
SN7HC04ABL
IC3023
MC74HC244AFR
IC3029
MC74HC244AFR
IC3022
SN7HC04ABL
IC3025
SN7HC74ABL
IC3613
SN7HC08ABL
IC3026
IC3027
IC3028
SN74LS221NSR
Q3101
Q3102
Q3103
UN5213-TW
D3101
MA141K-TW
D3102
MA141K-TW
D3103
MA141K-TW
L3011
VLP0147-T
L3100
L3101
TP3008
EYF6CU
CTP3010
ADCK PHASE
VR3007
220/VR5
6A1 BUS(3:80)
6A2 BUS(4:71)
R3134 100K/J3
R3135 100K/J3
R3127 4700/J3
R3128 22K/J3
R3107 *PAT/J3
R3108 *PAT/J3
R3109 100/J3
R3116 *PAT/J3
R3118 470/J3
R3137 *PAT/J3
R3136 0/J3
R3117 0/J3
R3120 *PAT/J3
R3122 *PAT/J3
R3121 *PAT/J3
R3119 *PAT/J3
R3138 *PAT/J3
R3129
R3130
R3131
R3132
R3133
R3140
R3141
R3142
R3143
R3123
R3124
R3125 *PAT/J3
R3114
R3115 33K/RE
R3094 1000/J3
R3095 220/J3
R3092 1000/J3
R3093 220/J3
R3105 *PAT/J3
R3106
C3089 0.1/UFV
C3090 0.1/UFV
C3091 0.1/UFV
C3093 0.1/UFV
C3095 0.1/UFV
C3099 6V33/EVY
C3092 *PAT/UV
C3101 47P/UV
C3102 47P/UV
C3120
C3121 *PAT/UFV
C3118
C3119
C3103
C3104
C3105
C3106 0.1/UFV
C3096
C3097
C3098
C3116
GND
VCC
CLKI
MCLKO
NEXT
ADCLK
VDD
CK27I
ADENL
LOWLUX
SYNCL
BF
ABF
CPO3
CPO2
CPO1
FRAME
FH2IN
PRE
CLR
CLK
CX
RX


5
6
7
8
9
10
11
12
13
14
15
16
IC3020
CG24692-4188
IC3707
SN7HC04ABL
L3011
VLP0147-T
CAM_+5V
C3090
0.1/UFV
C3099
6V33/EYV
R3107
*PAT/J3
R3108
*PAT/J3
R3109
100/J3
TP3008
EYF6CU
CTP3010
C3093
0.1/UFV
C3091
0.1/UFV
C3095
0.1/UFV
R3105
*PAT/J3
R3106
C3089
0.1/UFV
R3102
R3101
R3100
R3099
100K/J3
6A1 BUS(3:80)
6A2 BUS(4:71)
IC3023
MC74HC244AFR
IC3029
MC74HC244AFR
R3117
0/J3
R3120
*PAT/J3
R3122
*PAT/J3
R3121
*PAT/J3
R3119
*PAT/J3
IC3022
SN7HC04ABL
R3110
0/J3
R3126
0/J3
C3094
*PAT/UV
C3115
*PAT/UV
R3116
*PAT/J3
R3118
470/J3
R3137
*PAT/J3
R3136
0/J3
ADCK PHASE
VR3007
220/VR5
C3092
*PAT/UV
TP3422
EYF6CU
TP3010
EYF6CU
R3111
1000/J3
R3112
2200/J3
IC3024
MC74HC244AFR
C3096
0.1/UFV
C3097
0.1/UFV
C3098
0.1/UFV
C3116
0.1/UFV
GND
2FCKO
MCK_GND
CDACK
YDACLK
MCK
CCD_HD
CCD_VD
SAFETY_MIX
CPO1
CPO2
CPO3
ADJ_BF
MCLKO
ADCLKO
ADR0
ADR1
ADR2
ADR3
ADR4
ADR5
ADR6
ADR7
CPS_SYNC
CAM_CP
CAM_HD
CAM_VP_L
YDA_REF
HDI
CAM_SC2
CAM_SC1
WNDID
R3138
*PAT/J3
L3100
IC3025
SN7HC74ABL
R3129
C3120
C3121
*PAT/UFV
R3130
R3131
R3132
R3133
Q3101
Q3102
IC3613
SN7HC08ABL
C3118
IC3027
IC3026
R3143
R3123
IC3009
SN7HC04ABL
R3094
1000/J3
R3095
220/J3
R3142
R3124
R3092
1000/J3
R3093
220/J3
C3102
47P/UV
R3115
33K/RE
IC3028
SN74LS221NSR
R3125
*PAT/J3
C3103
C3104
C3105
C3106
0.1/UFV
SN74LS221NSR
D
PRE
Q
CLK
CLR

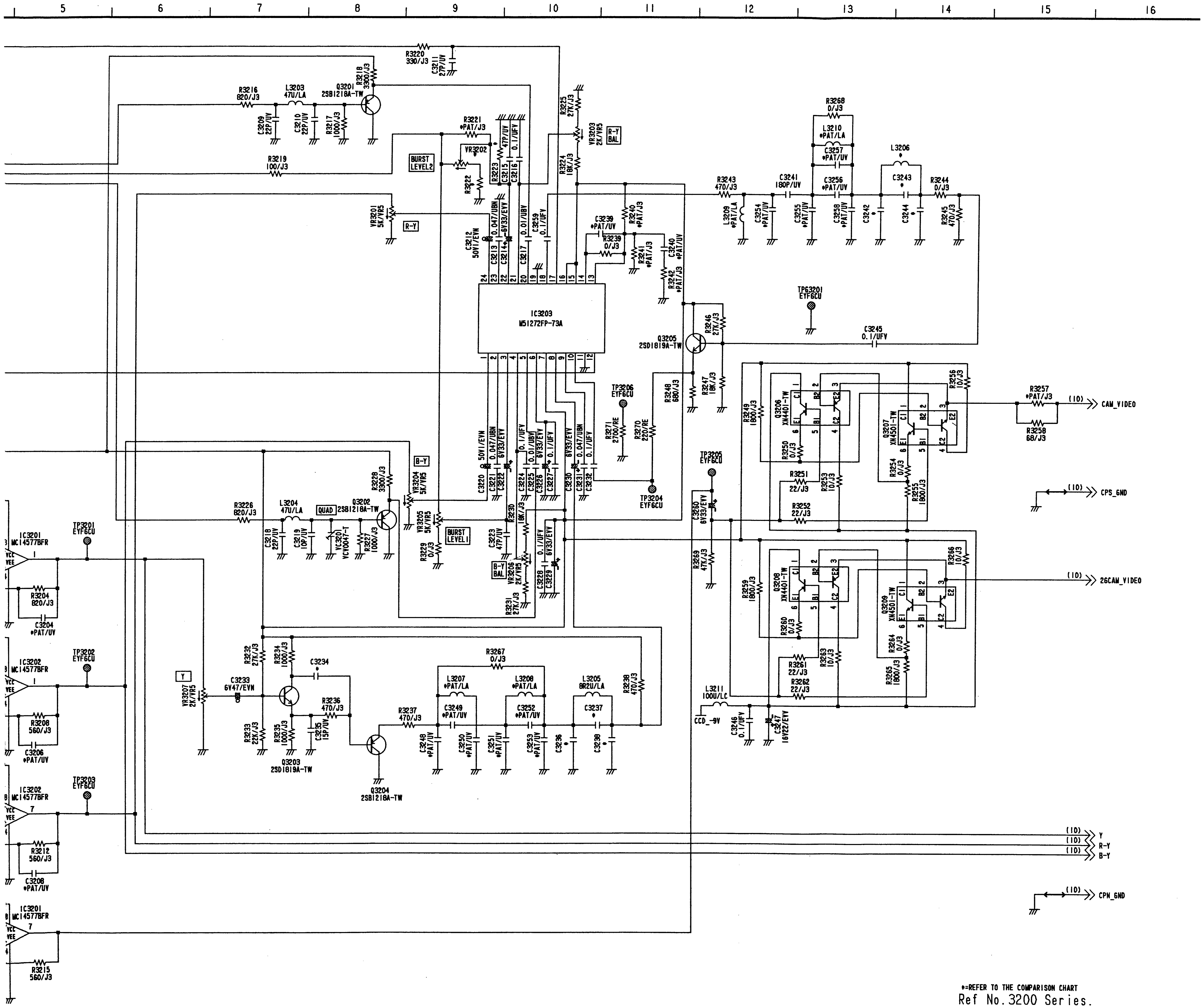
*=REFER TO THE COMPARISON CHART

Ref No.3000 Series.

PROCESS SCHEMATIC DIAGRAM 4／12 (E15:Page CBA-10)



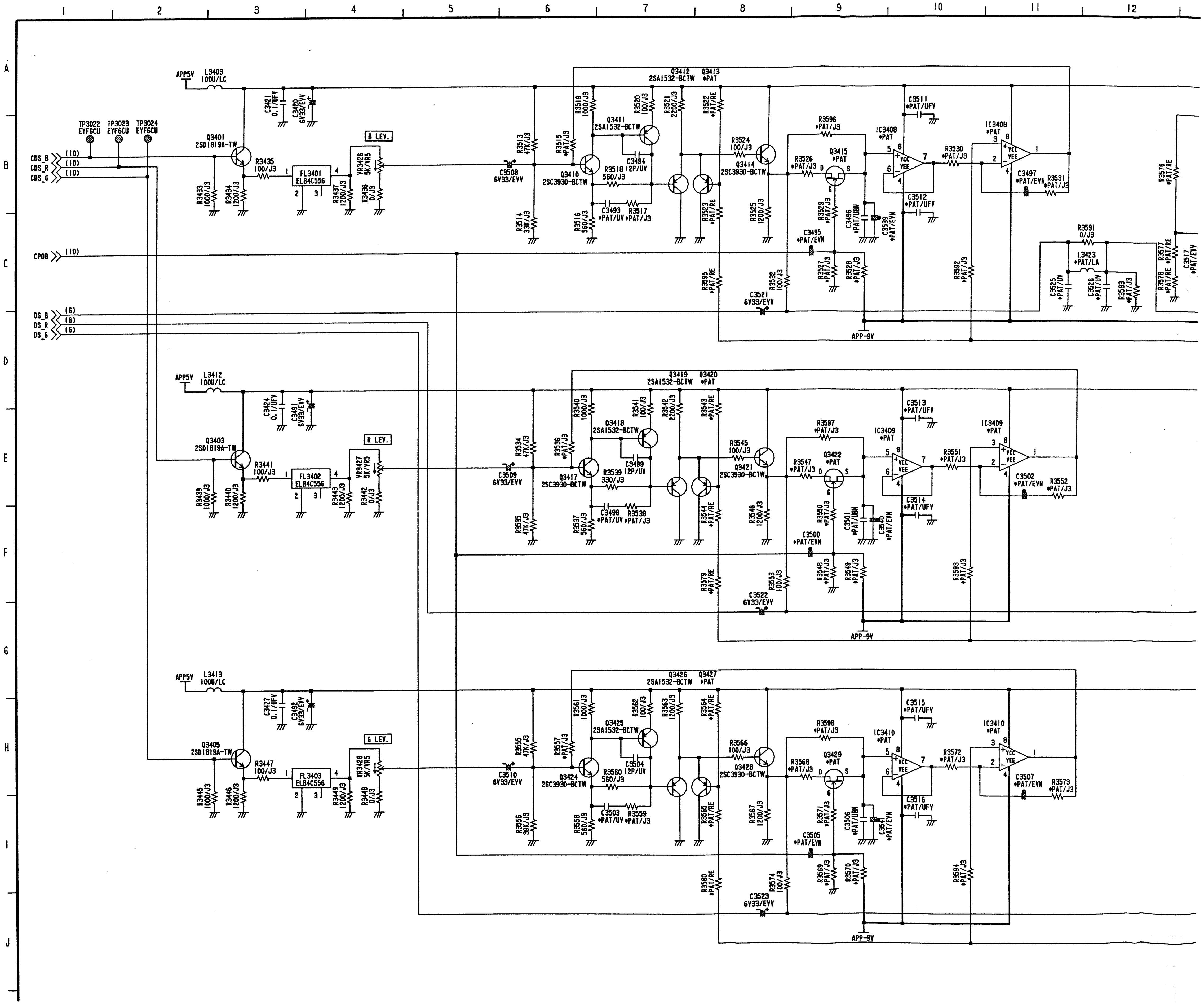
1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
J
IC3707
SN74HC04ABL
CAM_CP
CAM_SC2
CAM_BFP
CAM_SC1
CAM_+5V
CAM_+9V
CAM_Y
CAM_B-Y
CAM_R-Y
CCD_-9V
IC3203
M51272FP-73A
IC3201
MC14577BFR
IC3202
MC14577BFR
Q3201
2SB1218A-TW
Q3202
2SB1218A-TW
Q3203
2SD1819A-TW
Q3204
2SB1218A-TW
Q3205
2SD1819A-TW
Q3206
XN4401-TW
TP3201
TP3202
TP3203
TP3204
TP3205
TP3206
EYF6CU
R3216
820/J3
L3203
47U/LA
R3218
3300/J3
R3220
330/J3
C3211
27P/UV
R3219
100/J3
R3217
1000/J3
VR3201
5K/VR5
VR3202
VR3203
2K/VR5
VR3204
5K/VR5
VR3205
5K/VR5
VR3206
2K/VR5
VR3207
2K/VR5
R-Y
R-Y BAL
B-Y
B-Y BAL
BURST LEVEL1
BURST LEVEL2
QUAD
Y
L3201
100U/LC
L3202
100U/LC
L3204
47U/LA
R3226
820/J3
VC3201
VCV0047-T
R3228
3300/J3
R3227
1000/J3
R3201
39K/J3
R3202
10K/J3
R3203
560/J3
R3204
820/J3
C3204
*PAT/UV
R3205
27K/J3
R3206
10K/J3
R3207
560/J3
R3208
560/J3
C3206
*PAT/UV
R3209
27K/J3
R3210
10K/J3
R3211
560/J3
R3212
560/J3
C3208
*PAT/UV
R3213
*PAT/J3
R3214
560/J3
R3215
560/J3
C3203
6V33/EVV
C3205
6V33/EVV
C3207
6V33/EVV
C3233
6V47/EVN
R3232
27K/J3
R3233
22K/J3
R3234
1000/J3
R3235
1000/J3
R3236
470/J3
R3237
470/J3
R3267
0/J3
L3205
8R2U/LA
L3206
*PAT/LA
L3207
*PAT/LA
R3238
470/J3
R3243
470/J3
C3241
180P/UV
R3246
27K/J3
R3247
18K/J3
R3248
680/J3
R3270
220/RE
R3271
2700/RE
L3211
100U/LC
C3246
0.1/UFV
C3247
16V22/EVV

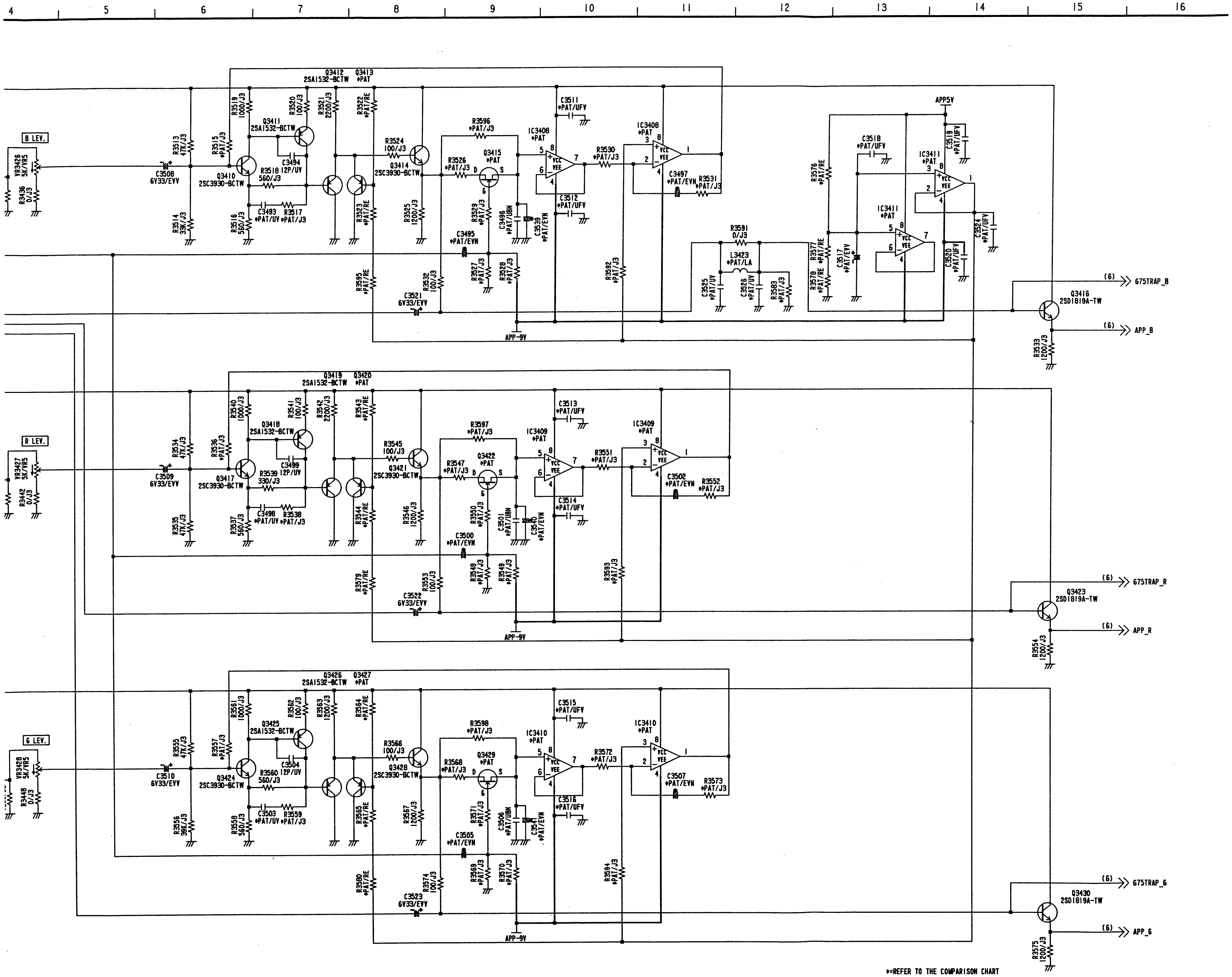

5
6
7
8
9
10
11
12
13
14
15
16
R3220 330/J3
C3211 27P/UV
R3218 3300/J3
R3216 820/J3
L3203 47U/LA
Q3201 2SB1218A-TW
C3209 22P/UV
C3210 22P/UV
R3217 1000/J3
R3219 100/J3
R3221 *PAT/J3
VR3202
BURST LEVEL2
R3222
R3223
C3215 47P/UV
C3216 0.1/UFV
R3225 27K/J3
VR3203 2K/VR5
R-Y BAL
R3224 18K/J3
VR3201 5K/VR5
R-Y
C3212 50V1/EVN
C3213 0.047/UBH
C3214 6V33/EVY
C3217 0.01/UBV
C3259 0.1/UFV
C3239 *PAT/UV
R3239 0/J3
R3240 *PAT/J3
R3241 *PAT/J3
C3240 *PAT/UV
R3242 *PAT/J3
IC3203 M51272FP-73A
R3243 470/J3
L3209 *PAT/LA
C3254 *PAT/UV
C3241 180P/UV
C3255 *PAT/UV
R3268 0/J3
L3210 *PAT/LA
C3257 *PAT/UV
C3256 *PAT/UV
C3258 *PAT/UV
C3242 *
L3206 *
C3243 *
C3244 *
R3244 0/J3
R3245 470/J3
TP63201 EYF6CU
Q3205 2SD1819A-TW
R3246 27K/J3
R3247 18K/J3
C3245 0.1/UFV
R3248 680/J3
TP3206 EYF6CU
R3271 2200/RE
R3270 220/RE
TP3204 EYF6CU
TP3205 EYF6CU
C3260 6V33/EVY
R3269 47K/J3
R3249 1800/J3
Q3206 XN4401-TW
R3250 0/J3
R3251 22/J3
R3252 22/J3
R3253 10/J3
Q3207 XN4501-TW
R3254 0/J3
R3255 1800/J3
R3256 10/J3
R3257 *PAT/J3
R3258 68/J3
(10) CAM_VIDEO
(10) CPS_GND
R3259 1800/J3
Q3208 XN4401-TW
R3260 0/J3
R3261 22/J3
R3262 22/J3
R3263 10/J3
Q3209 XN4501-TW
R3264 0/J3
R3265 1800/J3
R3266 10/J3
(10) 2GCAM_VIDEO
L3211 100U/LC
CCD_-9V
C3246 0.1/UFV
C3247 16V22/EVY
C3220 50V1/EVN
C3221 0.047/UBH
C3222 6V33/EVY
C3224 0.1/UFV
C3225 0.01/UBV
C3226 6V33/EVY
C3227 0.1/UFV
C3230 6V33/EVY
C3231 0.047/UBH
C3232 0.1/UFV
B-Y
VR3204 5K/VR5
R3228 3300/J3
Q3202 2SB1218A-TW
QUAD
R3226 820/J3
L3204 47U/LA
C3218 22P/UV
C3219 10P/UV
VC3201 VCY0047-T
R3227 1000/J3
VR3205 5K/VR5
BURST LEVEL1
R3229 0/J3
C3223 47P/UV
R3230 18K/J3
B-Y BAL
VR3206 2K/VR5
R3231 27K/J3
C3228 0.1/UFV
C3229 6V33/EVY
IC3201 MC14577BFR
TP3201 EYF6CU
R3204 820/J3
C3204 *PAT/UV
IC3202 MC14577BFR
TP3202 EYF6CU
R3208 560/J3
C3206 *PAT/UV
IC3202 MC14577BFR
TP3203 EYF6CU
R3212 560/J3
C3208 *PAT/UV
IC3201 MC14577BFR
R3215 560/J3
VCC
VEE
Y
VR3207 2K/VR5
C3233 6V47/EVN
R3232 27K/J3
R3233 22K/J3
R3234 1000/J3
C3234
R3235 1000/J3
C3235 15P/UV
R3236 470/J3
Q3203 2SD1819A-TW
R3237 470/J3
Q3204 2SB1218A-TW
R3267 0/J3
L3207 *PAT/LA
L3208 *PAT/LA
L3205 8R2U/LA
C3249 *PAT/UV
C3252 *PAT/UV
C3237 *
C3248 *PAT/UV
C3250 *PAT/UV
C3251 *PAT/UV
C3253 *PAT/UV
C3236
C3238 *
R3238 470/J3
(10) Y
(10) R-Y
(10) B-Y
(10) CPN_GND

*=REFER TO THE COMPARISON CHART

Ref No.3200 Series.

PROCESS SCHEMATIC DIAGRAM 5／12（E15:Page CBA-10）

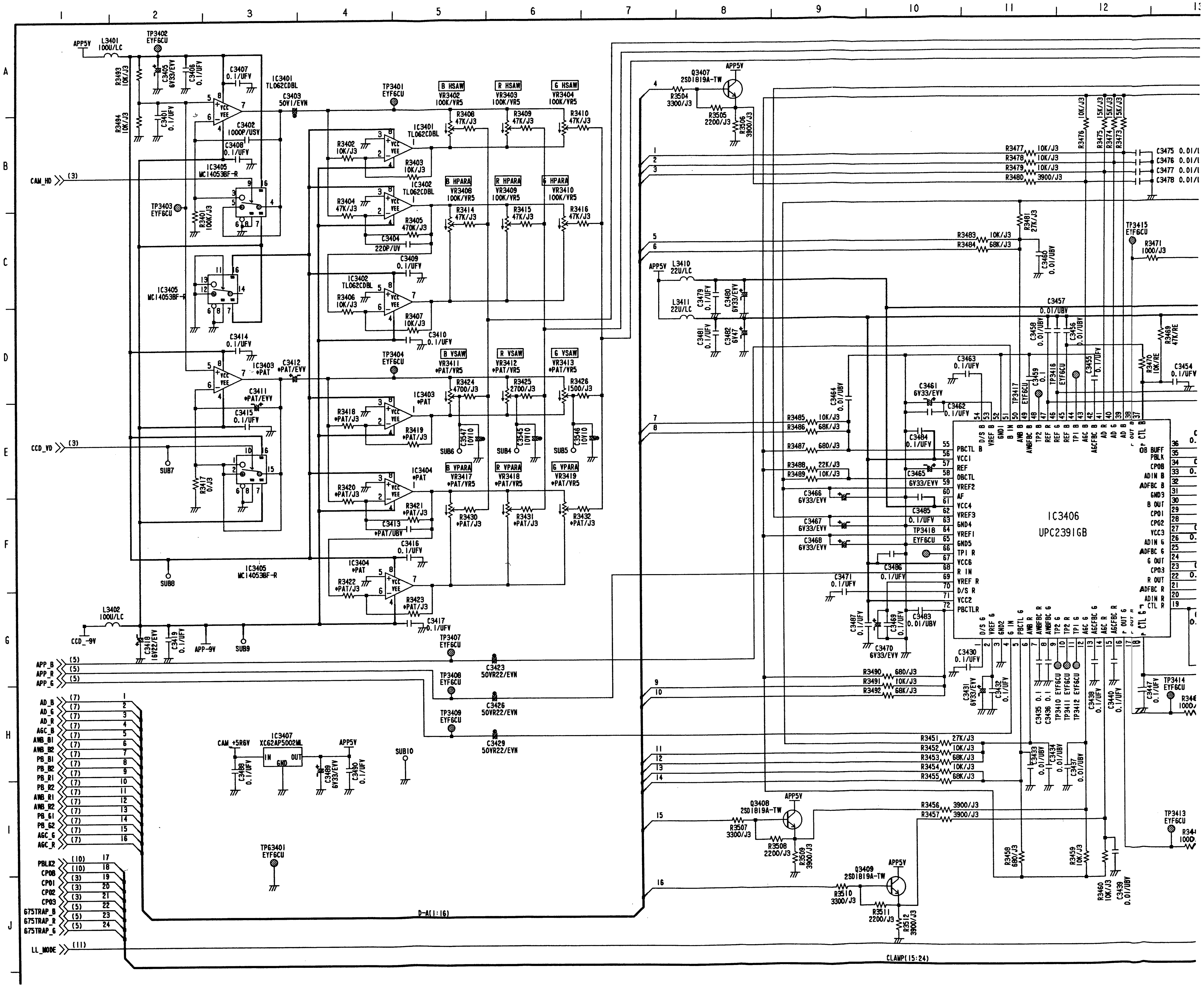

1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
J
APP5V
L3403
100U/LC
C3421
0.1/UFV
C3490
6V33/EVV
TP3022
EYF6CU
TP3023
EYF6CU
TP3024
EYF6CU
CDS_B
CDS_R
CDS_G
(10)
Q3401
2SD1819A-TW
R3435
100/J3
FL3401
ELB4C556
B LEV.
VR3426
5K/VR5
R3433
1000/J3
R3434
1200/J3
R3437
1200/J3
R3436
0/J3
CP0B
DS_B
DS_R
DS_G
(6)
R3513
47K/J3
R3514
33K/J3
C3508
6V33/EVV
R3515
•PAT/J3
R3519
1000/J3
Q3410
2SC3930-BCTW
Q3411
2SA1532-BCTW
R3520
100/J3
R3521
2200/J3
C3494
12P/UV
R3518
560/J3
R3516
560/J3
C3493
•PAT/UV
R3517
•PAT/J3
Q3412
2SA1532-BCTW
Q3413
•PAT
R3522
•PAT/RE
R3523
•PAT/RE
R3524
100/J3
Q3414
2SC3930-BCTW
R3525
1200/J3
R3596
•PAT/J3
R3526
•PAT/J3
Q3415
•PAT
R3529
•PAT/J3
C3495
•PAT/EVN
C3496
•PAT/UBN
C3539
•PAT/EVN
IC3408
•PAT
C3511
•PAT/UFV
C3512
•PAT/UFV
R3530
•PAT/J3
C3497
•PAT/EVN
R3531
•PAT/J3
R3527
•PAT/J3
R3528
•PAT/J3
R3595
•PAT/RE
C3521
6V33/EVV
R3532
100/J3
APP-9V
R3592
•PAT/J3
R3591
0/J3
L3423
•PAT/LA
C3525
•PAT/UV
C3526
•PAT/UV
R3593
•PAT/J3
R3576
•PAT/RE
R3577
•PAT/RE
R3578
•PAT/RE
C3517
•PAT/EVV
VCC
VEE
APP5V
L3412
100U/LC
C3424
0.1/UFV
C3491
6V33/EVV
Q3403
2SD1819A-TW
R3441
100/J3
FL3402
ELB4C556
R LEV.
VR3427
5K/VR5
R3439
1000/J3
R3440
1200/J3
R3443
1200/J3
R3442
0/J3
R3534
47K/J3
R3535
47K/J3
C3509
6V33/EVV
R3536
•PAT/J3
R3540
1000/J3
Q3417
2SC3930-BCTW
Q3418
2SA1532-BCTW
R3541
100/J3
R3542
2200/J3
C3499
12P/UV
R3539
330/J3
R3537
560/J3
C3498
•PAT/UV
R3538
•PAT/J3
Q3419
2SA1532-BCTW
Q3420
•PAT
R3543
•PAT/RE
R3544
•PAT/RE
R3545
100/J3
Q3421
2SC3930-BCTW
R3546
1200/J3
R3597
•PAT/J3
R3547
•PAT/J3
Q3422
•PAT
R3550
•PAT/J3
C3500
•PAT/EVN
C3501
•PAT/UBN
C3540
•PAT/EVN
IC3409
•PAT
C3513
•PAT/UFV
C3514
•PAT/UFV
R3551
•PAT/J3
C3502
•PAT/EVN
R3552
•PAT/J3
R3548
•PAT/J3
R3549
•PAT/J3
R3579
•PAT/RE
C3522
6V33/EVV
R3553
100/J3
APP-9V
R3593
•PAT/J3
APP5V
L3413
100U/LC
C3427
0.1/UFV
C3492
6V33/EVV
Q3405
2SD1819A-TW
R3447
100/J3
FL3403
ELB4C556
G LEV.
VR3428
5K/VR5
R3445
1000/J3
R3446
1200/J3
R3449
1200/J3
R3448
0/J3
R3555
47K/J3
R3556
39K/J3
C3510
6V33/EVV
R3557
•PAT/J3
R3561
1000/J3
Q3424
2SC3930-BCTW
Q3425
2SA1532-BCTW
R3562
100/J3
R3563
1200/J3
C3504
12P/UV
R3560
560/J3
R3558
560/J3
C3503
•PAT/UV
R3559
•PAT/J3
Q3426
2SA1532-BCTW
Q3427
•PAT
R3564
•PAT/RE
R3565
•PAT/RE
R3566
100/J3
Q3428
2SC3930-BCTW
R3567
1200/J3
R3598
•PAT/J3
R3568
•PAT/J3
Q3429
•PAT
R3571
•PAT/J3
C3505
•PAT/EVN
C3506
•PAT/UBN
C3541
•PAT/EVN
IC3410
•PAT
C3515
•PAT/UFV
C3516
•PAT/UFV
R3572
•PAT/J3
C3507
•PAT/EVN
R3573
•PAT/J3
R3569
•PAT/J3
R3570
•PAT/J3
R3580
•PAT/RE
C3523
6V33/EVV
R3574
100/J3
APP-9V
R3594
•PAT/J3


4
5
6
7
8
9
10
11
12
13
14
15
16
B LEV.
R LEV.
G LEV.
VR3426 5K/YR5
VR3427 5K/YR5
VR3428 5K/YR5
Q3410 2SC3930-BCTW
Q3411 2SA1532-BCTW
Q3412 2SA1532-BCTW
Q3413 *PAT
Q3414 2SC3930-BCTW
Q3415 *PAT
Q3416 2SD1819A-TW
Q3417 2SC3930-BCTW
Q3418 2SA1532-BCTW
Q3419 2SA1532-BCTW
Q3420 *PAT
Q3421 2SC3930-BCTW
Q3422 *PAT
Q3423 2SD1819A-TW
Q3424 2SC3930-BCTW
Q3425 2SA1532-BCTW
Q3426 2SA1532-BCTW
Q3427 *PAT
Q3428 2SC3930-BCTW
Q3429 *PAT
Q3430 2SD1819A-TW
IC3408 *PAT
IC3409 *PAT
IC3410 *PAT
IC3411 *PAT
APP5V
APP-9V
L3423 *PAT/LA
R3591 0/J3
(6) 675TRAP_B
(6) APP_B
(6) 675TRAP_R
(6) APP_R
(6) 675TRAP_G
(6) APP_G

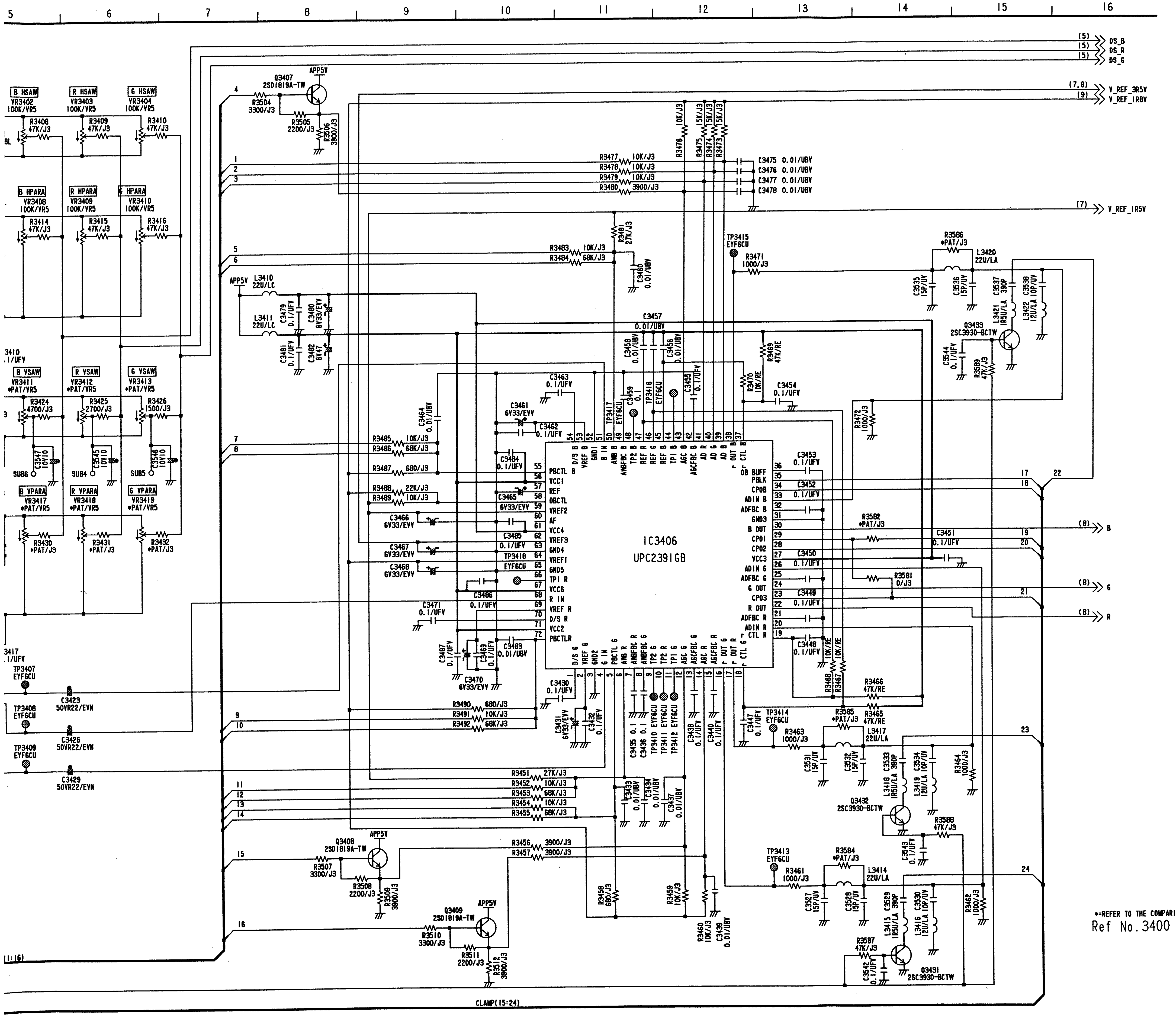
*=REFER TO THE COMPARISON CHART

Ref No.3400 Series.

PROCESS SCHEMATIC DIAGRAM 6／12 (E15:Page CBA-10)


1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
J
APP5V
L3401
100U/LC
TP3402
EYF6CU
R3403
10K/J3
C3405
6V33/EVV
C3406
0.1/UFV
C3407
0.1/UFV
IC3401
TL062CDBL
C3403
50V1/EVN
C3402
1000P/USV
C3408
0.1/UFV
R3404
10K/J3
C3401
0.1/UFV
IC3405
MC14053BF-R
CAM_HD
(3)
TP3403
EYF6CU
R3401
100K/J3
TP3401
EYF6CU
B HSAW
R HSAW
G HSAW
VR3402
100K/VR5
VR3403
100K/VR5
VR3404
100K/VR5
R3408
47K/J3
R3409
47K/J3
R3410
47K/J3
R3402
10K/J3
R3403
10K/J3
IC3402
TL062CDBL
B HPARA
R HPARA
G HPARA
VR3408
100K/VR5
VR3409
100K/VR5
VR3410
100K/VR5
R3404
47K/J3
R3405
470K/J3
C3404
220P/UV
R3414
47K/J3
R3415
47K/J3
R3416
47K/J3
C3409
0.1/UFV
R3406
10K/J3
R3407
10K/J3
C3410
0.1/UFV
C3414
0.1/UFV
IC3403
*PAT
C3412
*PAT/EVV
C3411
*PAT/EVV
C3415
0.1/UFV
TP3404
EYF6CU
B VSAW
R VSAW
G VSAW
VR3411
*PAT/VR5
VR3412
*PAT/VR5
VR3413
*PAT/VR5
R3424
4700/J3
R3425
2700/J3
R3426
1500/J3
R3418
*PAT/J3
R3419
*PAT/J3
C3547
10V10
C3545
10V10
C3546
10V10
SUB6
SUB4
SUB5
CCD_VD
(3)
SUB7
R3417
0/J3
IC3404
*PAT
B VPARA
R VPARA
G VPARA
VR3417
*PAT/VR5
VR3418
*PAT/VR5
VR3419
*PAT/VR5
R3420
*PAT/J3
R3421
*PAT/J3
C3413
*PAT/UBV
R3430
*PAT/J3
R3431
*PAT/J3
R3432
*PAT/J3
C3416
0.1/UFV
R3422
*PAT/J3
R3423
*PAT/J3
C3417
0.1/UFV
SUB8
L3402
100U/LC
CCD_-9V
C3418
16V22/EVV
C3419
0.1/UFV
APP-9V
SUB9
TP3407
EYF6CU
APP_B
APP_R
APP_G
(5)
C3423
50VR22/EVN
TP3408
EYF6CU
C3426
50VR22/EVN
TP3409
EYF6CU
C3429
50VR22/EVN
AD_B
AD_G
AD_R
AGC_B
ANB_B1
ANB_B2
PB_B1
PB_B2
PB_R1
PB_R2
ANB_R1
ANB_R2
PB_G1
PB_G2
AGC_G
AGC_R
(7)
IC3407
XC62AP5002ML
CAM_+5R6V
APP5V
C3488
0.1/UFV
C3489
6V33/EVV
C3490
0.1/UFV
SUB10
TP63401
EYF6CU
PBLK2
CP08
CP01
CP02
CP03
675TRAP_B
675TRAP_R
675TRAP_G
(10)
LL_MODE
(11)
D-A(1:16)
CLAMP(15:24)
Q3407
2SD1819A-TW
R3504
3300/J3
R3505
2200/J3
R3506
3900/J3
R3477
10K/J3
R3478
10K/J3
R3479
10K/J3
R3480
3900/J3
C3475 0.01/U
C3476 0.01/U
C3477 0.01/U
C3478 0.01/U
R3476
10K/J3
R3475
15K/J3
R3474
15K/J3
R3473
15K/J3
R3483
10K/J3
R3484
68K/J3
R3481
27K/J3
C3460
0.01/UBV
TP3415
EYF6CU
R3471
1000/J3
L3410
22U/LC
L3411
22U/LC
C3479
0.1/UFV
C3480
6V33/EVV
C3481
0.1/UFV
C3482
6V47
C3457
0.01/UBV
C3458
0.01/UBV
C3456
0.01/UBV
R3469
47K/RE
R3470
10K/RE
C3454
0.1/UFV
C3464
0.01/UBV
C3463
0.1/UFV
C3461
6V33/EVV
C3462
0.1/UFV
TP3417
EYF6CU
TP3416
EYF6CU
C3455
0.1/UFV
R3485
10K/J3
R3486
68K/J3
R3487
680/J3
R3488
22K/J3
R3489
10K/J3
C3484
0.1/UFV
C3465
6V33/EVV
C3466
6V33/EVV
C3485
0.1/UFV
C3467
6V33/EVV
C3468
6V33/EVV
TP3418
EYF6CU
C3486
0.1/UFV
C3471
0.1/UFV
C3487
0.1/UFV
C3469
0.1/UFV
C3483
0.01/UBV
C3470
6V33/EVV
C3430
0.1/UFV
IC3406
UPC2391GB
R3490
680/J3
R3491
10K/J3
R3492
68K/J3
C3431
6V33/EVV
C3432
0.1/UFV
TP3410 EYF6CU
TP3411 EYF6CU
TP3412 EYF6CU
C3438
0.1/UFV
C3440
0.1/UFV
C3447
0.1/UFV
TP3414
EYF6CU
R3451
27K/J3
R3452
10K/J3
R3453
68K/J3
R3454
10K/J3
R3455
68K/J3
C3433
0.01/UBV
C3434
0.01/UBV
C3437
0.01/UBV
Q3408
2SD1819A-TW
R3507
3300/J3
R3508
2200/J3
R3509
3900/J3
R3456
3900/J3
R3457
3900/J3
R3458
680/J3
R3459
10K/J3
Q3409
2SD1819A-TW
R3510
3300/J3
R3511
2200/J3
R3512
3900/J3
R3460
10K/J3
C3439
0.01/UBV
TP3413
EYF6CU

15:Page CBA-10)

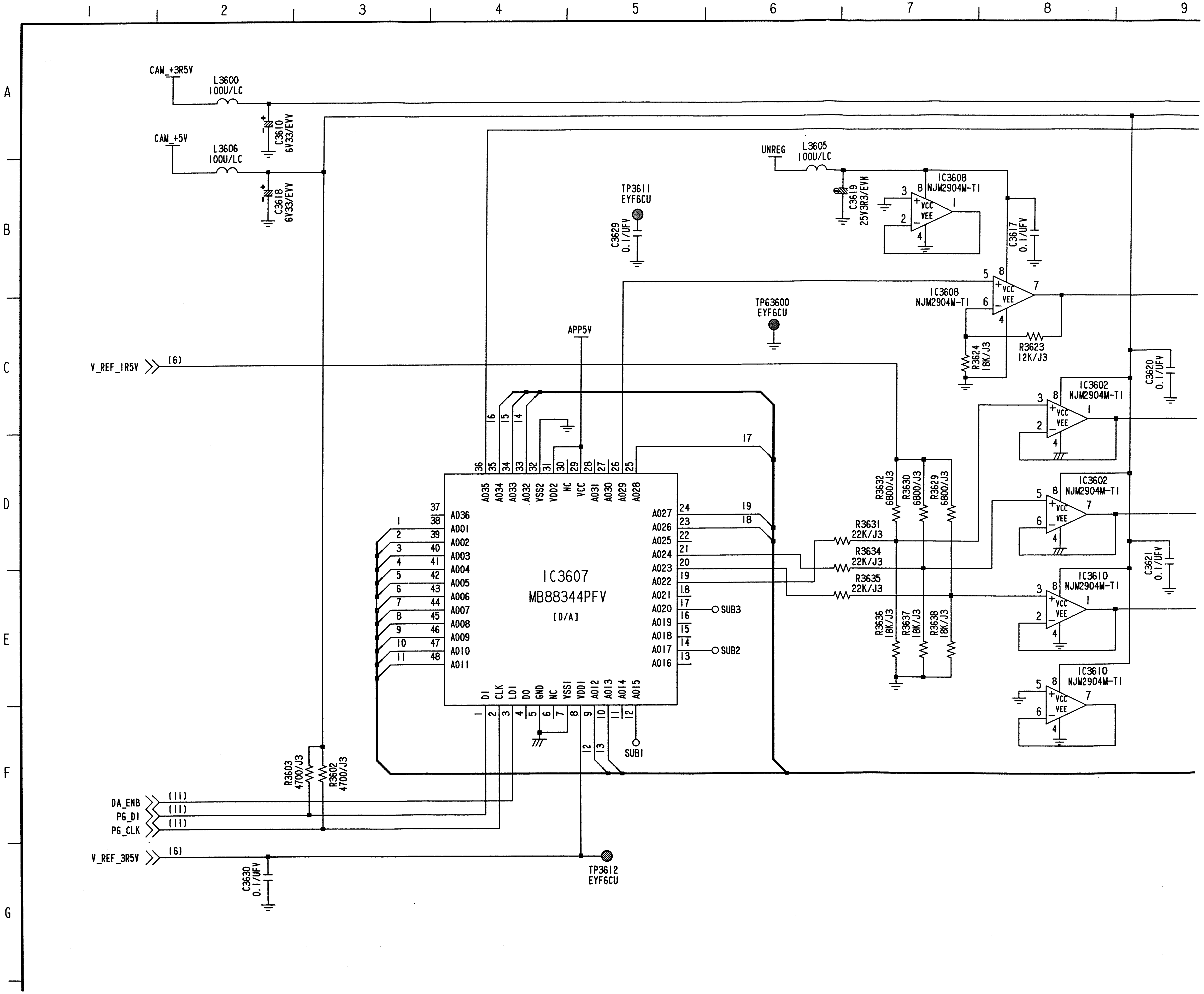


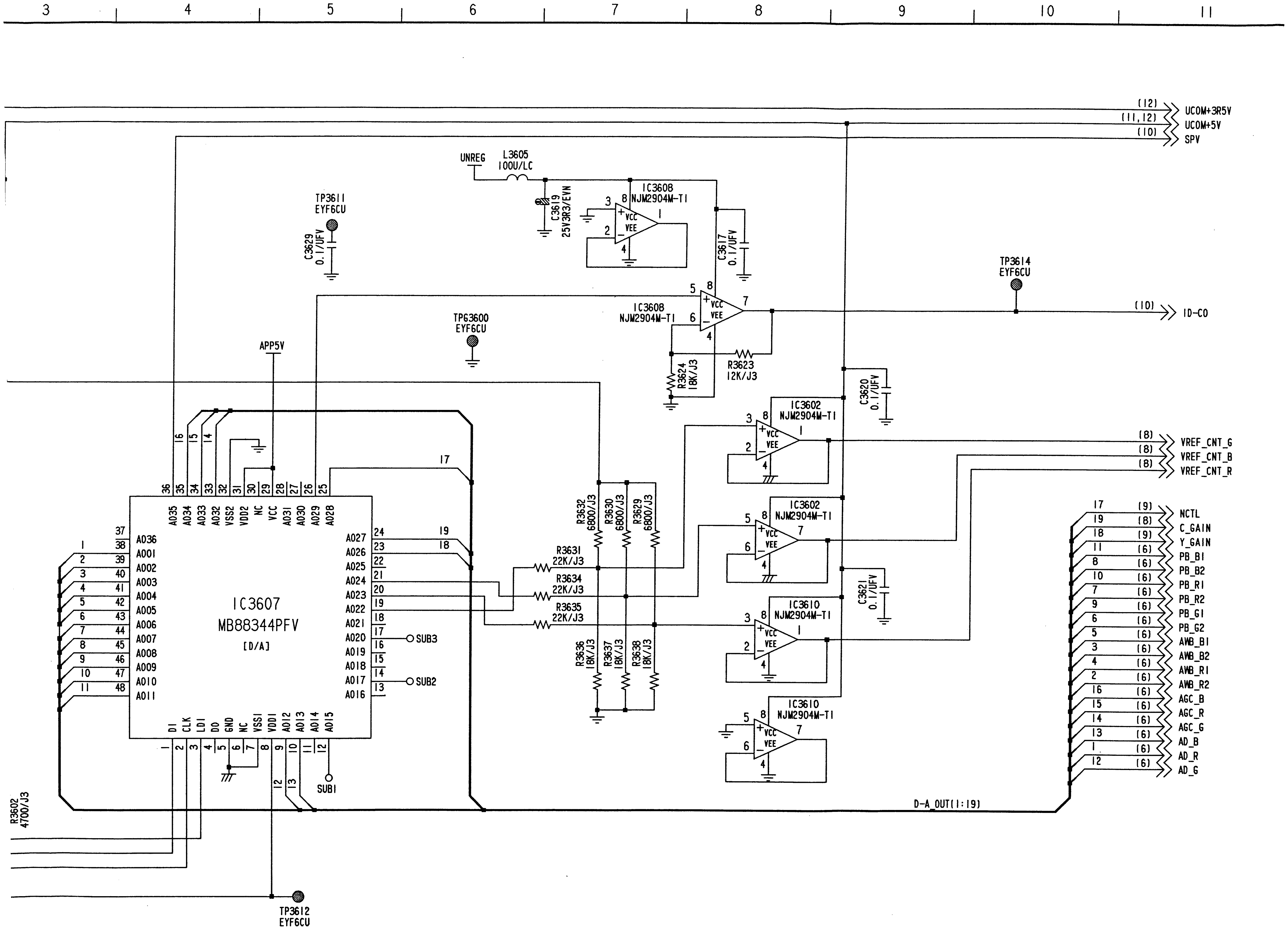
5
6
7
8
9
10
11
12
13
14
15
16
DS_B
DS_R
DS_G
V_REF_3R5V
V_REF_1R8V
V_REF_1R5V
B
G
R
IC3406
UPC2391GB
Q3407 2SD1819A-TW
Q3408 2SD1819A-TW
Q3409 2SD1819A-TW
Q3431 2SC3930-BCTW
Q3432 2SC3930-BCTW
Q3433 2SC3930-BCTW
APP5V
B HSAW
R HSAW
G HSAW
B HPARA
R HPARA
G HPARA
B VSAW
R VSAW
G VSAW
B VPARA
R VPARA
G VPARA
VR3402 100K/VR5
VR3403 100K/VR5
VR3404 100K/VR5
VR3408 100K/VR5
VR3409 100K/VR5
VR3410 100K/VR5
VR3411 *PAT/VR5
VR3412 *PAT/VR5
VR3413 *PAT/VR5
VR3417 *PAT/VR5
VR3418 *PAT/VR5
VR3419 *PAT/VR5
SUB6
SUB4
SUB5
TP3407 EYF6CU
TP3408 EYF6CU
TP3409 EYF6CU
TP3413 EYF6CU
TP3414 EYF6CU
TP3415 EYF6CU
TP3416 EYF6CU
TP3417 EYF6CU
TP3418 EYF6CU
C3423 50VR22/EVN
C3426 50VR22/EVN
C3429 50VR22/EVN
L3410 22U/LC
L3411 22U/LC
L3414 22U/LA
L3417 22U/LA
L3420 22U/LA
CLAMP(15:24)
(1:16)

*=REFER TO THE COMPARISON CHART

Ref No.3400 Series.

PROCESS SCHEMATIC DIAGRAM 7／12（E15:Page CBA-10）

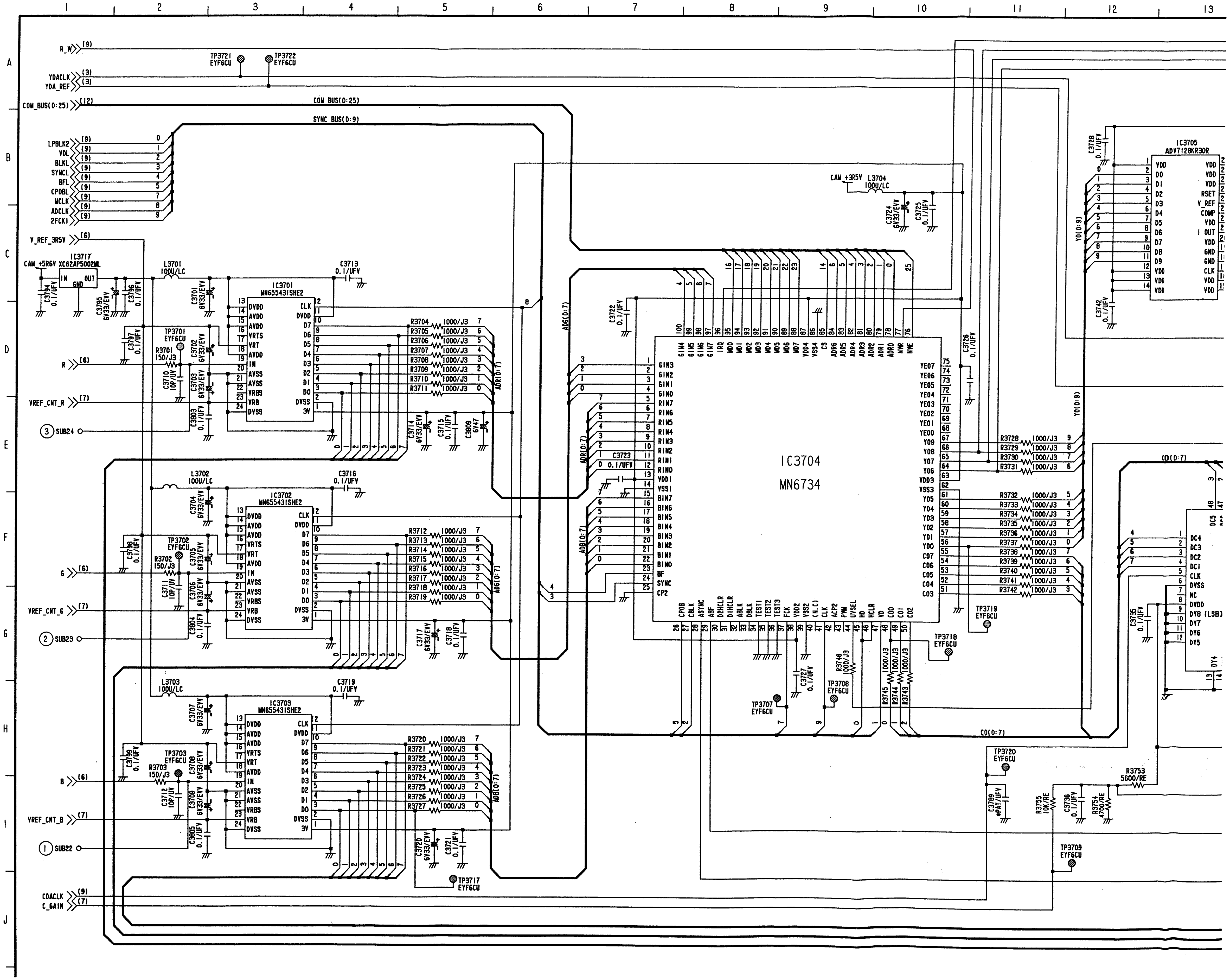

1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
CAM_+3R5V
L3600
100U/LC
C3610
6V33/EVV
CAM_+5V
L3606
100U/LC
C3618
6V33/EVV
UNREG
L3605
100U/LC
C3619
25V3R3/EVN
IC3608
NJM2904M-T1
VCC
VEE
C3617
0.1/UFV
TP3611
EYF6CU
C3629
0.1/UFV
IC3608
NJM2904M-T1
TPG3600
EYF6CU
R3624
18K/J3
R3623
12K/J3
APP5V
V_REF_1R5V
(6)
C3620
0.1/UFV
IC3602
NJM2904M-T1
17
19
18
R3632
6800/J3
R3630
6800/J3
R3629
6800/J3
R3631
22K/J3
R3634
22K/J3
R3635
22K/J3
C3621
0.1/UFV
IC3610
NJM2904M-T1
R3636
18K/J3
R3637
18K/J3
R3638
18K/J3
IC3607
MB88344PFV
[D/A]
AO35
AO34
AO33
AO32
VSS2
VDD2
NC
VCC
AO31
AO30
AO29
AO28
AO36
AO01
AO02
AO03
AO04
AO05
AO06
AO07
AO08
AO09
AO10
AO11
AO27
AO26
AO25
AO24
AO23
AO22
AO21
AO20
AO19
AO18
AO17
AO16
DI
CLK
LDI
DO
GND
NC
VSS1
VDD1
AO12
AO13
AO14
AO15
SUB3
SUB2
SUB1
R3603
4700/J3
R3602
4700/J3
DA_ENB
PG_DI
PG_CLK
(11)
V_REF_3R5V
(6)
C3630
0.1/UFV
TP3612
EYF6CU

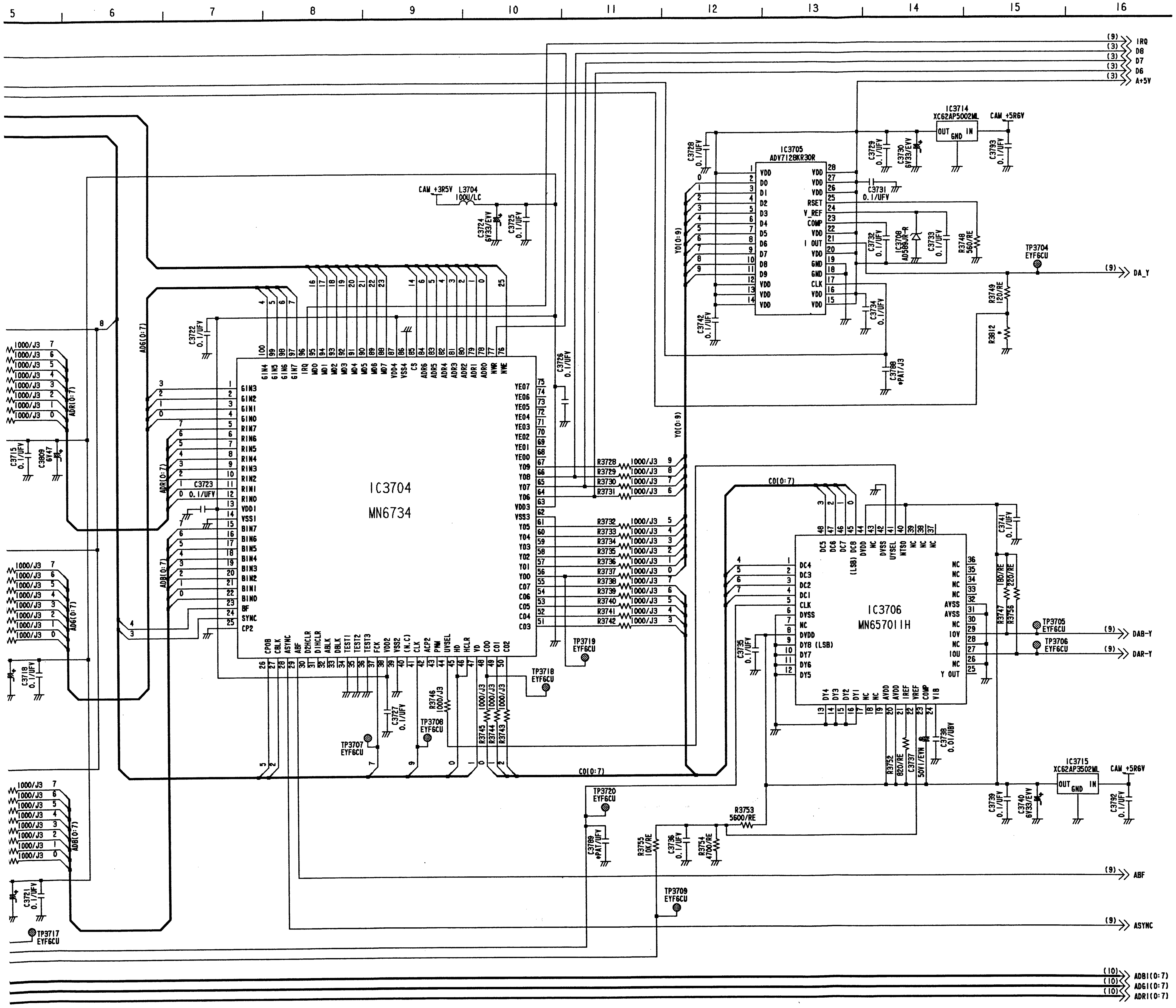

3
4
5
6
7
8
9
10
11
UCOM+3R5V
UCOM+5V
SPV
(12)
(11,12)
(10)
UNREG
L3605
100U/LC
C3619
25V3R3/EVN
IC3608
NJM2904M-T1
C3617
0.1/UFV
TP3611
EYF6CU
C3629
0.1/UFV
TP3614
EYF6CU
ID-CO
TPG3600
EYF6CU
APP5V
R3623
12K/J3
R3624
18K/J3
C3620
0.1/UFV
IC3602
NJM2904M-T1
VREF_CNT_G
VREF_CNT_B
VREF_CNT_R
(8)
IC3607
MB88344PFV
[D/A]
A035
A034
A033
A032
VSS2
VDD2
NC
VCC
A031
A030
A029
A028
A036
A001
A002
A003
A004
A005
A006
A007
A008
A009
A010
A011
A027
A026
A025
A024
A023
A022
A021
A020
A019
A018
A017
A016
DI
CLK
LDI
DO
GND
NC
VSS1
VDD1
A012
A013
A014
A015
SUB3
SUB2
SUB1
R3632
6800/J3
R3630
6800/J3
R3629
6800/J3
R3631
22K/J3
R3634
22K/J3
R3635
22K/J3
R3636
18K/J3
R3637
18K/J3
R3638
18K/J3
C3621
0.1/UFV
IC3610
NJM2904M-T1
VCC
VEE
NCTL
C_GAIN
Y_GAIN
PB_B1
PB_B2
PB_R1
PB_R2
PB_G1
PB_G2
AWB_B1
AWB_B2
AWB_R1
AWB_R2
AGC_B
AGC_R
AGC_G
AD_B
AD_R
AD_G
(9)
(8)
(9)
(6)
D-A_OUT(1:19)
R3602
4700/J3
TP3612
EYF6CU

*=REFER TO THE COMPARISON CHART

Ref No.3000 Series.

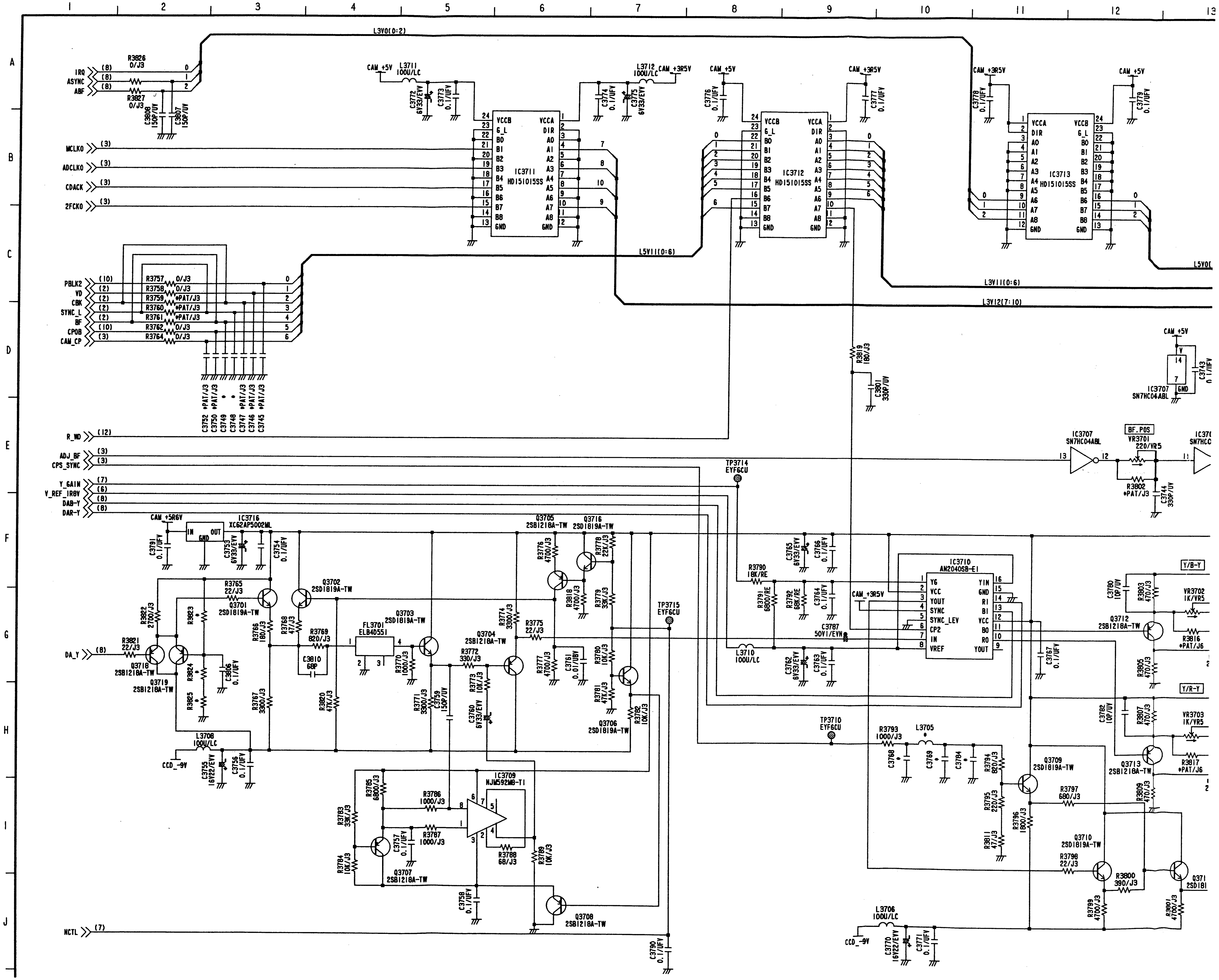
PROCESS SCHEMATIC DIAGRAM 8／12（E15:Page CBA-10）


1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I
J
R_W (9)
YDACLK (3)
YDA_REF (3)
COM_BUS(0:25) (12)
COM BUS(0:25)
SYNC BUS(0:9)
TP3721 EYF6CU
TP3722 EYF6CU
LPBLK2 (9)
VDL (9)
BLKL (9)
SYNCL (9)
BFL (9)
CPOBL (9)
MCLK (9)
ADCLK (9)
2FCK1 (9)
V_REF_3R5V (6)
IC3717 XC62AP5002ML
CAM_+5R6V
C3794 0.1/UFV
C3795 6V33/EVV
C3796 0.1/UFV
C3797 0.1/UFV
L3701 100U/LC
L3702 100U/LC
L3703 100U/LC
C3713 0.1/UFV
C3716 0.1/UFV
C3719 0.1/UFV
IC3701 MN65543ISHE2
IC3702 MN65543ISHE2
IC3703 MN65543ISHE2
DVDD
AVDD
VRTS
VRT
IN
AVSS
VRBS
VRB
DVSS
CLK
D7
D6
D5
D4
D3
D2
D1
D0
3V
TP3701 EYF6CU
TP3702 EYF6CU
TP3703 EYF6CU
R3701 150/J3
R3702 150/J3
R3703 150/J3
C3701 6V33/EVV
C3702 6V33/EVV
C3703 6V33/EVV
C3704 6V33/EVV
C3705 6V33/EVV
C3706 6V33/EVV
C3707 6V33/EVV
C3708 6V33/EVV
C3709 6V33/EVV
C3710 10P/UV
C3711 10P/UV
C3712 10P/UV
C3798 0.1/UFV
C3799 0.1/UFV
C3803 0.1/UFV
C3804 0.1/UFV
C3805 0.1/UFV
R (6)
G (6)
B (6)
VREF_CNT_R (7)
VREF_CNT_G (7)
VREF_CNT_B (7)
③ SUB24
② SUB23
① SUB22
R3704 1000/J3
R3705 1000/J3
R3706 1000/J3
R3707 1000/J3
R3708 1000/J3
R3709 1000/J3
R3710 1000/J3
R3711 1000/J3
R3712 1000/J3
R3713 1000/J3
R3714 1000/J3
R3715 1000/J3
R3716 1000/J3
R3717 1000/J3
R3718 1000/J3
R3719 1000/J3
R3720 1000/J3
R3721 1000/J3
R3722 1000/J3
R3723 1000/J3
R3724 1000/J3
R3725 1000/J3
R3726 1000/J3
R3727 1000/J3
ADR(0:7)
ADG(0:7)
ADB(0:7)
C3714 6V33/EVV
C3715 0.1/UFV
C3809 6V47
C3717 6V33/EVV
C3718 0.1/UFV
C3720 6V33/EVV
C3721 0.1/UFV
TP3717 EYF6CU
CDACLK (9)
C_GAIN (7)
C3722 0.1/UFV
C3723 0.1/UFV
IC3704
MN6734
GIN3
GIN2
GIN1
GIN0
RIN7
RIN6
RIN5
RIN4
RIN3
RIN2
RIN1
RIN0
VDD1
VSS1
BIN7
BIN6
BIN5
BIN4
BIN3
BIN2
BIN1
BIN0
BF
SYNC
CP2
YE07
YE06
YE05
YE04
YE03
YE02
YE01
YE00
Y09
Y08
Y07
Y06
VDD3
VSS3
Y05
Y04
Y03
Y02
Y01
Y00
C07
C06
C05
C04
C03
CAM_+3R5V
L3704 100U/LC
C3724 6V33/EVV
C3725 0.1/UFV
C3726 0.1/UFV
C3727 0.1/UFV
R3728 1000/J3
R3729 1000/J3
R3730 1000/J3
R3731 1000/J3
R3732 1000/J3
R3733 1000/J3
R3734 1000/J3
R3735 1000/J3
R3736 1000/J3
R3737 1000/J3
R3738 1000/J3
R3739 1000/J3
R3740 1000/J3
R3741 1000/J3
R3742 1000/J3
R3743 1000/J3
R3744 1000/J3
R3745 1000/J3
R3746 1000/J3
TP3707 EYF6CU
TP3708 EYF6CU
TP3718 EYF6CU
TP3719 EYF6CU
TP3720 EYF6CU
TP3709 EYF6CU
C0(0:7)
CD(0:7)
YO(0:9)
C3728 0.1/UFV
C3742 0.1/UFV
C3735 0.1/UFV
C3736 0.1/UFV
C3789 PAT/UFV
R3753 5600/RE
R3754 470/RE
R3755 10K/RE
IC3705 ADV7128KR30R
VDD
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
RSET
V_REF
COMP
I OUT
GND
CLK
DC4
DC3
DC2
DC1
DVSS
NC
DVDD
DY8 (LSB)
DY7
DY6
DY5
DY4

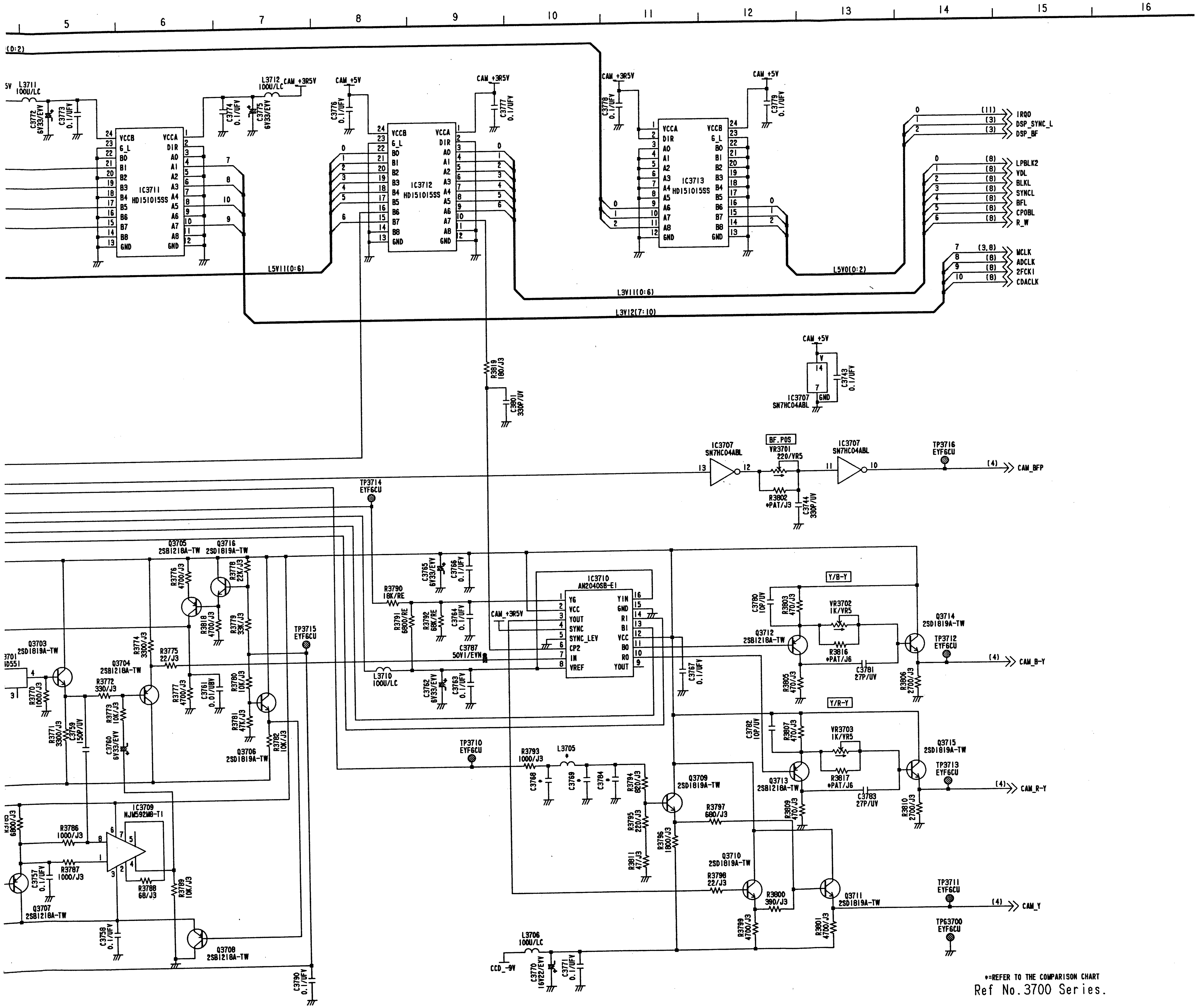

IC3704
MN6734
IC3705
ADV7128KR30R
IC3706
MN657011H
IC3714
XC62AP5002ML
IC3715
XC62AP3502ML
IC3708
AD589JR-R
CAM +3R5V
L3704
100U/LC
CAM +5R6V
IRQ
D8
D7
D6
A+5V
DA_Y
DAB-Y
DAR-Y
ABF
ASYNC
ADB1(0:7)
ADG1(0:7)
ADR1(0:7)
ADR(0:7)
ADG(0:7)
ADB(0:7)
YO(0:9)
CO(0:7)
TP3704
TP3705
TP3706
TP3707
TP3708
TP3709
TP3717
TP3718
TP3719
TP3720
EYF6CU
R3753
5600/RE
R3748
560/RE
R3749
120/RE
R3752
820/RE
R3754
470/RE
R3755
10K/RE
R3746
1000/J3
R3747
180/RE
R3756
220/RE
C3722
C3723
C3724
C3725
C3726
C3727
C3728
C3729
C3730
C3731
C3732
C3733
C3734
C3735
C3736
C3737
C3738
C3739
C3740
C3741
C3742
C3788
C3789
C3792
C3793
C3809
0.1/UFV
6V33/EVV
50V1/EVW

Ref No.3700 Series.

PROCESS SCHEMATIC DIAGRAM 9／12（E15:Page CBA-10）



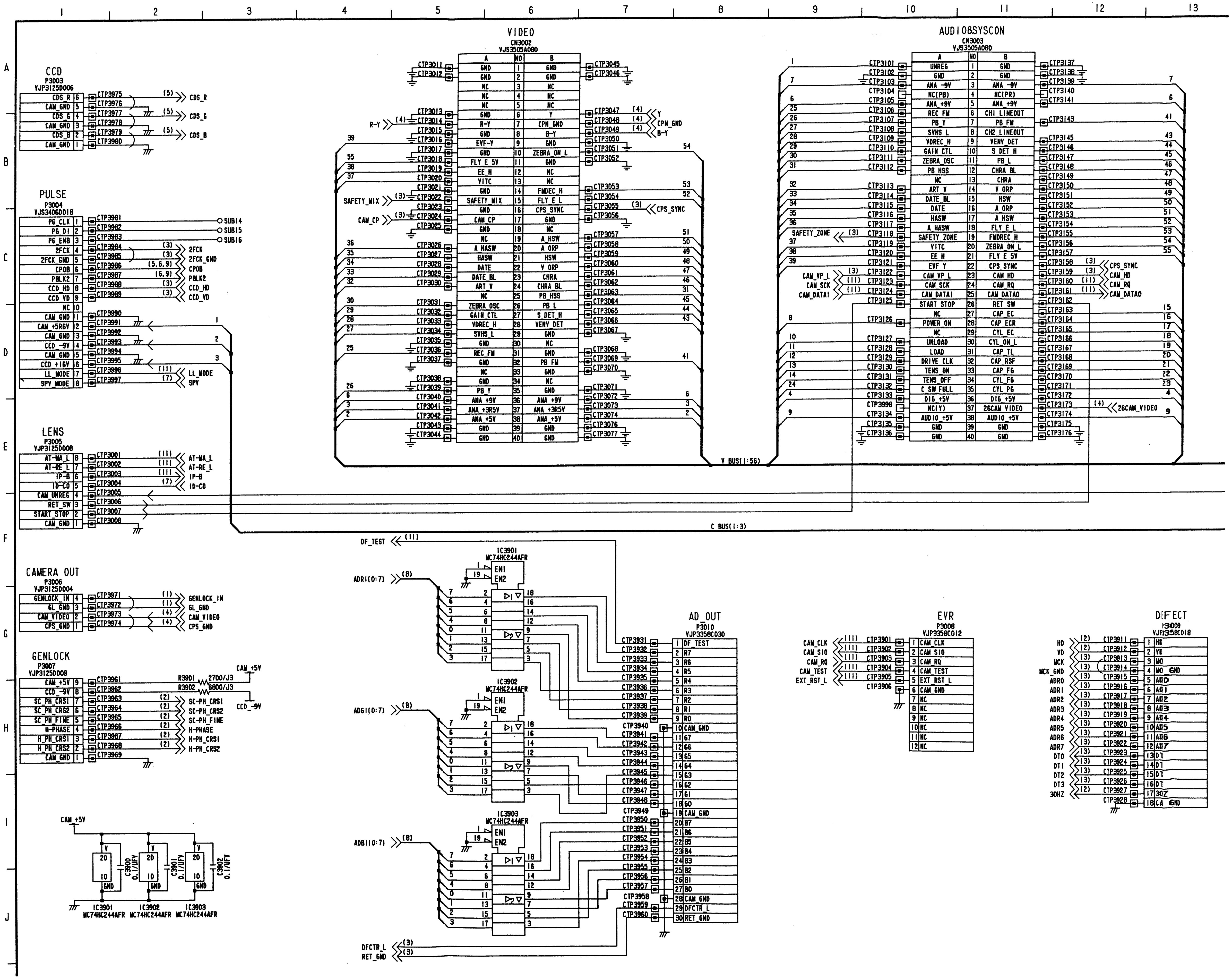
L3V0(0:2)
IRQ
ASYNC
ABF
R3826 0/J3
R3827 0/J3
C3806 150P/UV
C3807 150P/UV
MCLK0
ADCLK0
CDACK
2FCK0
CAM_+5V
L3711 100U/LC
C3772 6V33/EVV
C3773 0.1/UFV
IC3711 HD151015SS
L3712 100U/LC
CAM_+3R5V
C3774 0.1/UFV
C3775 6V33/EVV
C3776 0.1/UFV
IC3712 HD151015SS
C3777 0.1/UFV
C3778 0.1/UFV
IC3713 HD151015SS
C3779 0.1/UFV
L5V11(0:6)
L3V11(0:6)
L3V12(7:10)
L5V0(
PBLK2
VD
CBK
SYNC_L
BF
CPOB
CAM_CP
R3757 0/J3
R3758 0/J3
R3759 *PAT/J3
R3760 *PAT/J3
R3761 *PAT/J3
R3762 0/J3
R3764 0/J3
C3752 C3750 C3749 C3748 C3747 C3746 C3745
*PAT/J3
R3819 180/J3
C3801 330P/UV
IC3707 SN7HC04ABL
R_WD
ADJ_BF
CPS_SYNC
TP3714 EYF6CU
BF.POS
VR3701 220/VR5
R3802 *PAT/J3
C3744 330P/UV
Y_GAIN
V_REF_IRBV
DAB-Y
DAR-Y
CAM_+5R6V
IC3716 XC62AP5002ML
C3791 0.1/UFV
C3753 6V33/EVV
C3754 0.1/UFV
Q3705 2SB1218A-TW
Q3716 2SD1819A-TW
R3776 4700/J3
R3778 22K/J3
C3765 6V33/EVV
C3766 0.1/UFV
IC3710 AN2040SB-E1
Y/B-Y
Y/R-Y
R3765 22/J3
Q3701 2SD1819A-TW
Q3702 2SD1819A-TW
R3822 2700/J3
R3823
R3821 22/J3
DA_Y
Q3718 2SB1218A-TW
Q3719 2SB1218A-TW
R3824
R3825
C3806 0.1/UFV
R3766 180/J3
R3768 47/J3
R3769 820/J3
C3810 68P
FL3701 ELB4D551
Q3703 2SD1819A-TW
R3774 3300/J3
R3775 22/J3
Q3704 2SB1218A-TW
R3772 330/J3
R3770 1000/J3
R3818 4700/J3
R3779 33K/J3
TP3715 EYF6CU
R3790 18K/RE
R3791 6800/RE
R3792 68K/RE
C3764 0.1/UFV
CAM_+3R5V
C3787 50V1/EVN
L3710 100U/LC
C3762 6V33/EVV
C3763 0.1/UFV
C3767 0.1/UFV
C3780 10P/UV
R3803 470/J3
VR3702 1K/VR5
Q3712 2SB1218A-TW
R3816 *PAT/J6
R3805 4700/J3
R3767 3300/J3
R3820 47K/J3
R3771 3300/J3
C3759 150P/UV
R3773 10K/J3
C3760 6V33/EVV
R3777 4700/J3
C3761 0.01/UBV
R3780 10K/J3
R3781 47K/J3
R3782 10K/J3
Q3706 2SD1819A-TW
TP3710 EYF6CU
R3793 1000/J3
L3705
C3768
C3769
C3784
R3794 820/J3
C3782 10P/UV
R3807 470/J3
VR3703 1K/VR5
Q3713 2SB1218A-TW
R3817 *PAT/J6
L3708 100U/LC
CCD_-9V
C3755 16V22/EVV
C3756 0.1/UFV
R3785 6800/J3
R3786 1000/J3
IC3709 NJM592M8-T1
R3783 33K/J3
R3784 10K/J3
C3757 0.1/UFV
R3787 1000/J3
R3788 68/J3
R3789 10K/J3
Q3707 2SB1218A-TW
C3758 0.1/UFV
Q3708 2SB1218A-TW
Q3709 2SD1819A-TW
R3797 680/J3
R3795 220/J3
R3796 1800/J3
R3811 47/J3
R3809 4700/J3
Q3710 2SD1819A-TW
R3798 22/J3
R3800 390/J3
R3799 4700/J3
R3801 4700/J3
Q371 2SD181
NCTL
C3790 0.1/UFV
L3706 100U/LC
C3770 16V22/EVV
C3771 0.1/UFV

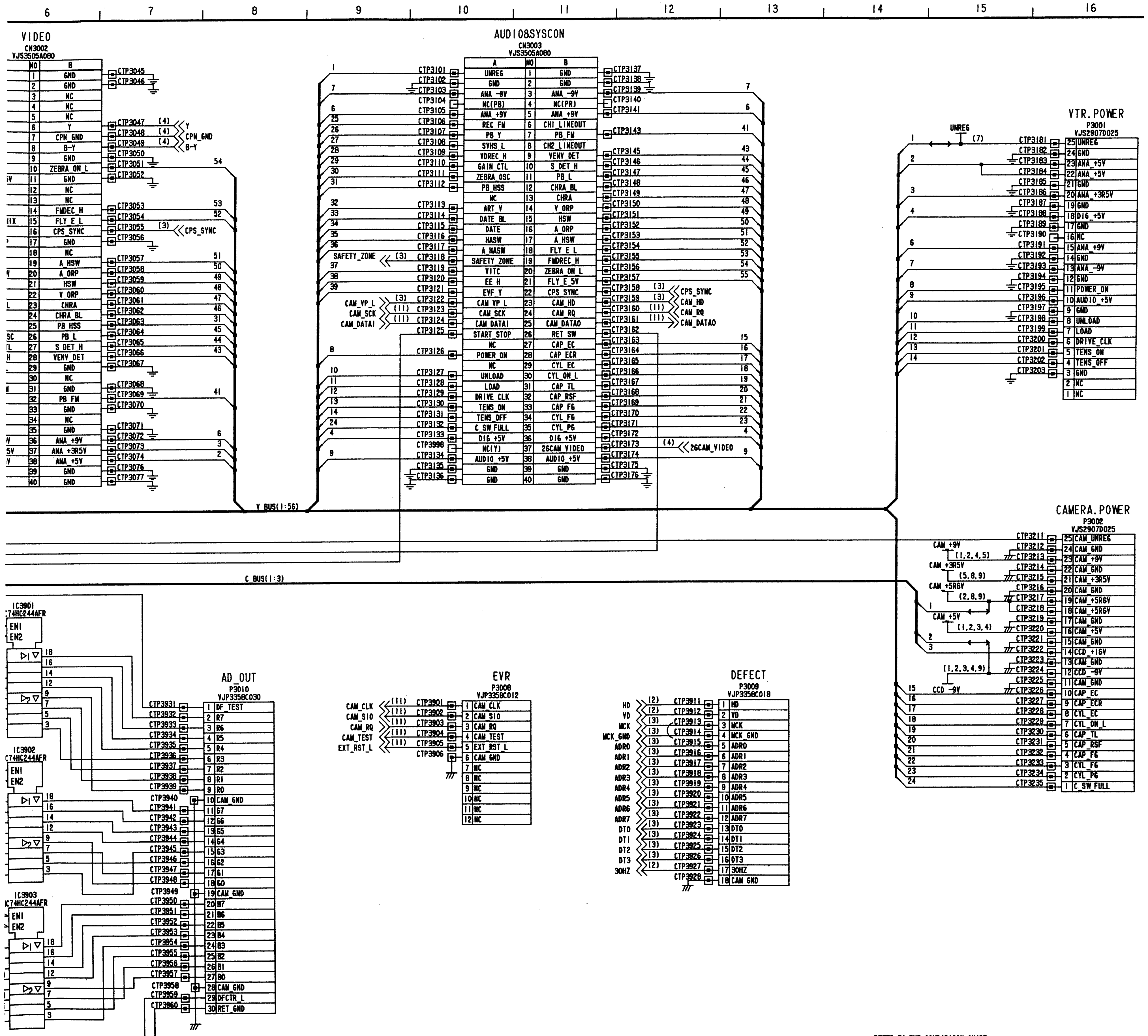

5
6
7
8
9
10
11
12
13
14
15
16
L3711 100U/LC
C3772 6V33/EVY
C3773 0.1/UFV
L3712 100U/LC
CAM_+3R5V
C3774 0.1/UFV
C3775 6V33/EVY
IC3711 HD151015SS
CAM_+5V
C3776 0.1/UFV
C3777 0.1/UFV
IC3712 HD151015SS
C3778 0.1/UFV
C3779 0.1/UFV
IC3713 HD151015SS
VCCB
VCCA
G_L
DIR
GND
L5VI1(0:6)
L3VI1(0:6)
L3VI2(7:10)
L5VO(0:2)
IRQO
DSP_SYNC_L
DSP_BF
LPBLK2
VDL
BLKL
SYNCL
BFL
CPOBL
R_W
MCLK
ADCLK
2FCK1
CDACLK
R3819 180/J3
C3801 330P/UV
IC3707 SN74HC04ABL
C3743 0.1/UFV
BF.POS
VR3701 220/VR5
R3802 *PAT/J3
C3744 330P/UV
TP3716 EYF6CU
CAM_BFP
TP3714 EYF6CU
Q3705 2SB1218A-TW
Q3716 2SD1819A-TW
R3776 4700/J3
R3778 22K/J3
R3818 4700/J3
R3779 33K/J3
R3790 18K/RE
R3791 6800/RE
R3792 68K/RE
C3765 6V33/EVY
C3766 0.1/UFV
C3764 0.1/UFV
C3787 50V1/EVN
IC3710 AN2040SB-E1
YG
VCC
YOUT
SYNC
SYNC_LEV
CP2
IN
VREF
YIN
GND
RI
BI
BO
RO
YOUT
L3710 100U/LC
C3762 6V33/EVY
C3763 0.1/UFV
C3767 0.1/UFV
Y/B-Y
C3780 10P/UV
R3803 470/J3
VR3702 1K/VR5
R3816 *PAT/J6
C3781 27P/UV
Q3712 2SB1218A-TW
Q3714 2SD1819A-TW
TP3712 EYF6CU
CAM_B-Y
R3805 470/J3
R3806 2700/J3
Y/R-Y
C3782 10P/UV
R3807 470/J3
VR3703 1K/VR5
R3817 *PAT/J6
C3783 27P/UV
Q3713 2SB1218A-TW
Q3715 2SD1819A-TW
TP3713 EYF6CU
CAM_R-Y
R3809 470/J3
R3810 2700/J3
Q3703 2SD1819A-TW
Q3704 2SB1218A-TW
R3774 3300/J3
R3775 22/J3
R3772 330/J3
R3773 10K/J3
R3770 1000/J3
R3771 3300/J3
C3759 150P/UV
C3760 6V33/EVY
R3777 4700/J3
C3761 0.01/10BV
R3780 10K/J3
R3781 47K/J3
R3782 10K/J3
Q3706 2SD1819A-TW
TP3715 EYF6CU
TP3710 EYF6CU
R3793 1000/J3
L3705
C3768
C3769
C3784
R3794 820/J3
R3795 220/J3
R3811 47/J3
R3796 1800/J3
Q3709 2SD1819A-TW
R3797 680/J3
Q3710 2SD1819A-TW
R3798 22/J3
R3800 390/J3
Q3711 2SD1819A-TW
R3799 4700/J3
R3801 4700/J3
TP3711 EYF6CU
CAM_Y
TP63700 EYF6CU
IC3709 NJM592M8-T1
R3786 1000/J3
R3787 1000/J3
R3788 68/J3
R3789 10K/J3
R3785 6800/J3
C3757 0.1/UFV
Q3707 2SB1218A-TW
C3758 0.1/UFV
Q3708 2SB1218A-TW
C3790 0.1/UFV
L3706 100U/LC
CCD_-9V
C3770 16V22/EVY
C3771 0.1/UFV

*=REFER TO THE COMPARISON CHART

Ref No. 3700 Series.

PROCESS SCHEMATIC DIAGRAM 10／12（E15:Page CBA-10）

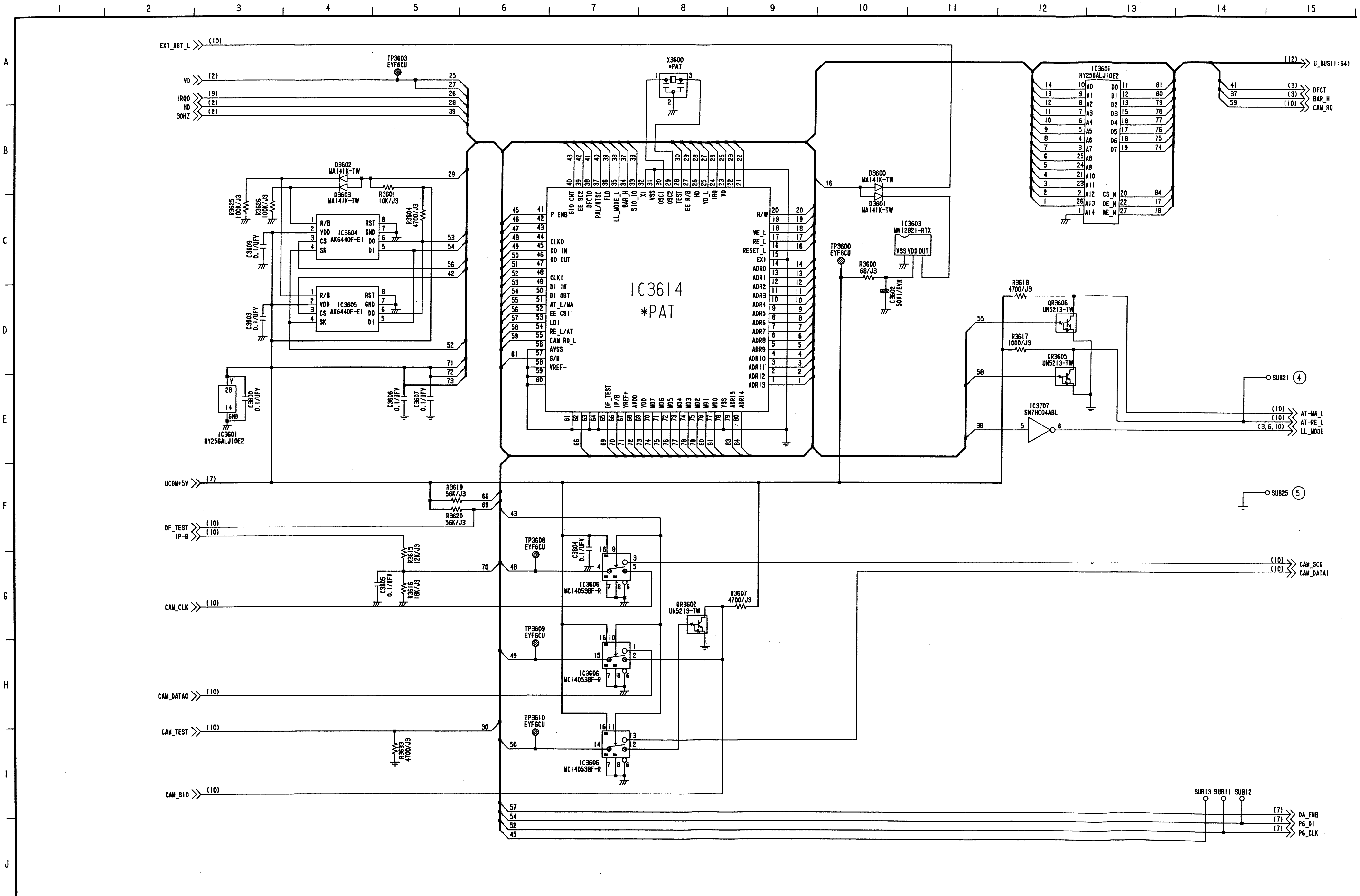

CCD
P3003
VJP3125D006
PULSE
P3004
VJS3406D018
LENS
P3005
VJP3125D006
CAMERA OUT
P3006
VJP3125D004
GENLOCK
P3007
VJP3125D009
VIDEO
CN3002
VJS3505A080
AUDIO&SYSCON
CN3003
VJS3505A080
Y BUS(1:56)
C BUS(1:3)
IC3901
MC74HC244AFR
IC3902
MC74HC244AFR
IC3903
MC74HC244AFR
AD_OUT
P3010
VJP3358C030
EVR
P3008
VJP3358C012
DEFECT
P3009
VJP3358C018
DF_TEST
ADR1(0:7)
ADG1(0:7)
ADB1(0:7)
DFCTR_L
RET_GND
CAM_+5V
R3901 2700/J3
R3902 6800/J3
CCD_-9V
C3900 0.1/UFY
C3901 0.1/UFY
C3902 0.1/UFY


6
7
8
9
10
11
12
13
14
15
16
VIDEO
CN3002
VJS3505A080
AUDIO&SYSCON
CN3003
VJS3505A080
A
NO
B
UNREG
GND
ANA -9V
NC(PB)
NC(PR)
ANA +9V
REC FM
CH1_LINEOUT
PB Y
PB FM
SVHS_L
CH2_LINEOUT
VDREC H
VENV_DET
GAIN CTL
S_DET_H
ZEBRA_OSC
PB L
PB HSS
CHRA BL
NC
CHRA
ART V
V ORP
DATE BL
HSW
DATE
A ORP
HASW
A HSW
A HASW
FLY E L
SAFETY ZONE
FMDREC H
VITC
ZEBRA ON L
EE H
FLY E 5V
EVF Y
CPS SYNC
CAM VP L
CAM HD
CAM SCK
CAM RQ
CAM DATAI
CAM DATAO
START STOP
RET SW
CAP EC
POWER ON
CAP ECR
CYL EC
UNLOAD
CYL ON L
LOAD
CAP TL
DRIVE CLK
CAP RSF
TENS ON
CAP FG
TENS OFF
CYL FG
C SW FULL
CYL PG
DIG +5V
NC(Y)
26CAM VIDEO
AUDIO +5V
Y
CPN_GND
B-Y
ZEBRA ON L
FMDEC H
FLY E L
CPS SYNC
A HSW
A ORP
HSW
V ORP
CHRA BL
PB HSS
PB L
S DET H
VENV DET
PB FM
ANA +9V
ANA +3R5V
ANA +5V
SAFETY_ZONE
CAM_VP_L
CAM_SCK
CAM_DATAI
CPS_SYNC
CAM_HD
CAM_RQ
CAM_DATAO
26CAM_VIDEO
Y BUS(1:56)
C BUS(1:3)
VTR.POWER
P3001
VJS2907D025
UNREG
UNREG
GND
ANA +5V
ANA +3R5V
DIG +5V
ANA +9V
ANA -9V
POWER ON
AUDIO +5V
UNLOAD
LOAD
DRIVE CLK
TENS ON
TENS OFF
NC
CAMERA.POWER
P3002
VJS2907D025
CAM UNREG
CAM GND
CAM +9V
CAM +3R5V
CAM +5R6V
CAM +5V
CCD +16V
CCD -9V
CAP EC
CAP ECR
CYL EC
CYL ON L
CAP TL
CAP RSF
CAP FG
CYL FG
CYL PG
C SW FULL
IC3901
C74HC244AFR
IC3902
C74HC244AFR
IC3903
C74HC244AFR
EN1
EN2
AD_OUT
P3010
VJP3358C030
DF TEST
R7
R6
R5
R4
R3
R2
R1
R0
CAM GND
G7
G6
G5
G4
G3
G2
G1
G0
B7
B6
B5
B4
B3
B2
B1
B0
DFCTR L
RET GND
EVR
P3008
VJP3358C012
CAM CLK
CAM SIO
CAM RQ
CAM TEST
EXT RST L
CAM GND
DEFECT
P3009
VJP3358C018
HD
VD
MCK
MCK GND
ADR0
ADR1
ADR2
ADR3
ADR4
ADR5
ADR6
ADR7
DT0
DT1
DT2
DT3
30HZ
CAM GND

*=REFER TO THE COMPARISON CHART

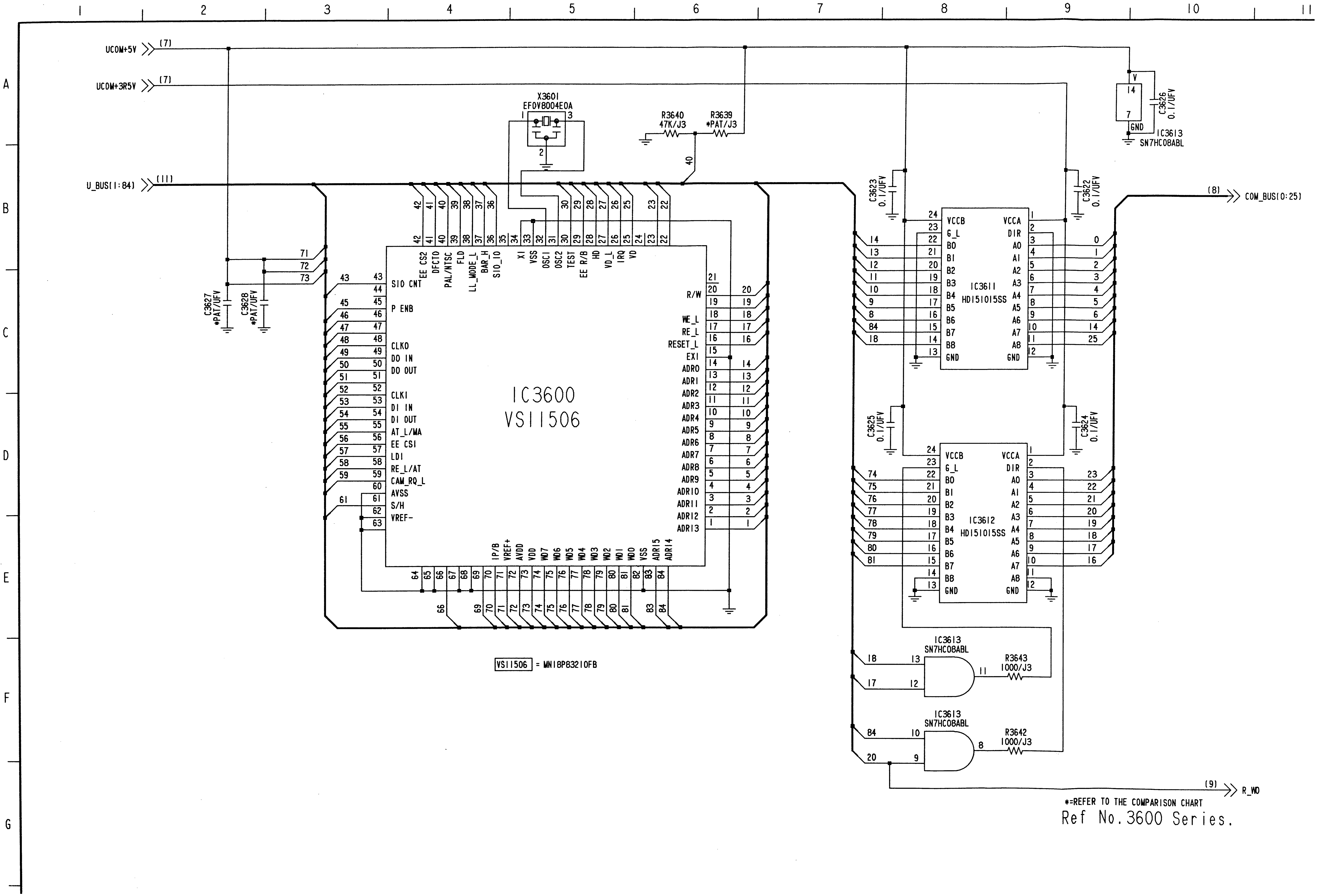
Ref No.3000 Series.

PROCESS SCHEMATIC DIAGRAM 11／12 (E15:Page CBA-10)


EXT_RST_L
VD
IRQ0
HD
30HZ
TP3603 EYF6CU
X3600 *PAT
IC3614 *PAT
D3602 MA141K-TW
D3603 MA141K-TW
R3601 10K/J3
R3604 4700/J3
R3625 100K/J3
R3626 100K/J3
IC3604 AK6440F-E1
IC3605 AK6440F-E1
C3609 0.1/UFV
C3603 0.1/UFV
C3600 0.1/UFV
C3606 0.1/UFV
C3607 0.1/UFV
IC3601 HY256ALJ10E2
D3600 MA141K-TW
D3601 MA141K-TW
IC3603 MN12821-RTX
TP3600 EYF6CU
R3600 68/J3
C3602 50V1/EVN
R3618 4700/J3
QR3606 UN5213-TW
R3617 1000/J3
QR3605 UN5213-TW
IC3707 SN7HC04ABL
U_BUS(1:84)
DFCT
BAR_H
CAM_RQ
SUB21 ④
AT-MA_L
AT-RE_L
LL_MODE
SUB25 ⑤
UCOM+5V
R3619 56K/J3
R3620 56K/J3
DF_TEST
IP-B
R3615 12K/J3
R3616 18K/J3
C3605 0.1/UFV
TP3608 EYF6CU
C3604 0.1/UFV
IC3606 MC14053BF-R
CAM_CLK
QR3602 UN5213-TW
R3607 4700/J3
TP3609 EYF6CU
CAM_DATA0
TP3610 EYF6CU
CAM_TEST
R3633 4700/J3
CAM_SIO
CAM_SCK
CAM_DATA1
SUB13 SUB11 SUB12
DA_ENB
PG_DI
PG_CLK

*=REFER TO THE COMPARISON CHART
Ref No. 3000 Series.

PROCESS SCHEMATIC DIAGRAM 12／12 (E15:Page CBA-10)


1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
UCOM+5V (7)
UCOM+3R5V (7)
U_BUS(1:84) (11)
X3601
EF0V8004E0A
R3640
47K/J3
R3639
*PAT/J3
C3627
*PAT/UFV
C3628
*PAT/UFV
IC3600
VS11506
SIO CNT
P ENB
CLKO
DO IN
DO OUT
CLKI
DI IN
DI OUT
AT_L/MA
EE CSI
LDI
RE_L/AT
CAM_RQ_L
AVSS
S/H
VREF-
EE CS2
DFCTO
PAL/NTSC
FLD
LL_MODE_L
BAR_H
SIO_IO
XI
VSS
OSC1
OSC2
TEST
EE R/B
HD
VD_L
IRQ
VD
R/W
WE_L
RE_L
RESET_L
EXI
ADR0
ADR1
ADR2
ADR3
ADR4
ADR5
ADR6
ADR7
ADR8
ADR9
ADR10
ADR11
ADR12
ADR13
IP/B
VREF+
AVDD
VDD
MD7
MD6
MD5
MD4
MD3
MD2
MD1
MD0
VSS
ADR15
ADR14
IC3613
SN7HC08ABL
C3626
0.1/UFV
C3623
0.1/UFV
C3622
0.1/UFV
C3625
0.1/UFV
C3624
0.1/UFV
IC3611
HD151015SS
IC3612
HD151015SS
VCCB
G_L
B0
B1
B2
B3
B4
B5
B6
B7
B8
GND
VCCA
DIR
A0
A1
A2
A3
A4
A5
A6
A7
A8
GND
(8) COM_BUS(0:25)
R3643
1000/J3
R3642
1000/J3
(9) R_WD

VS11506 = MN18P83210FB

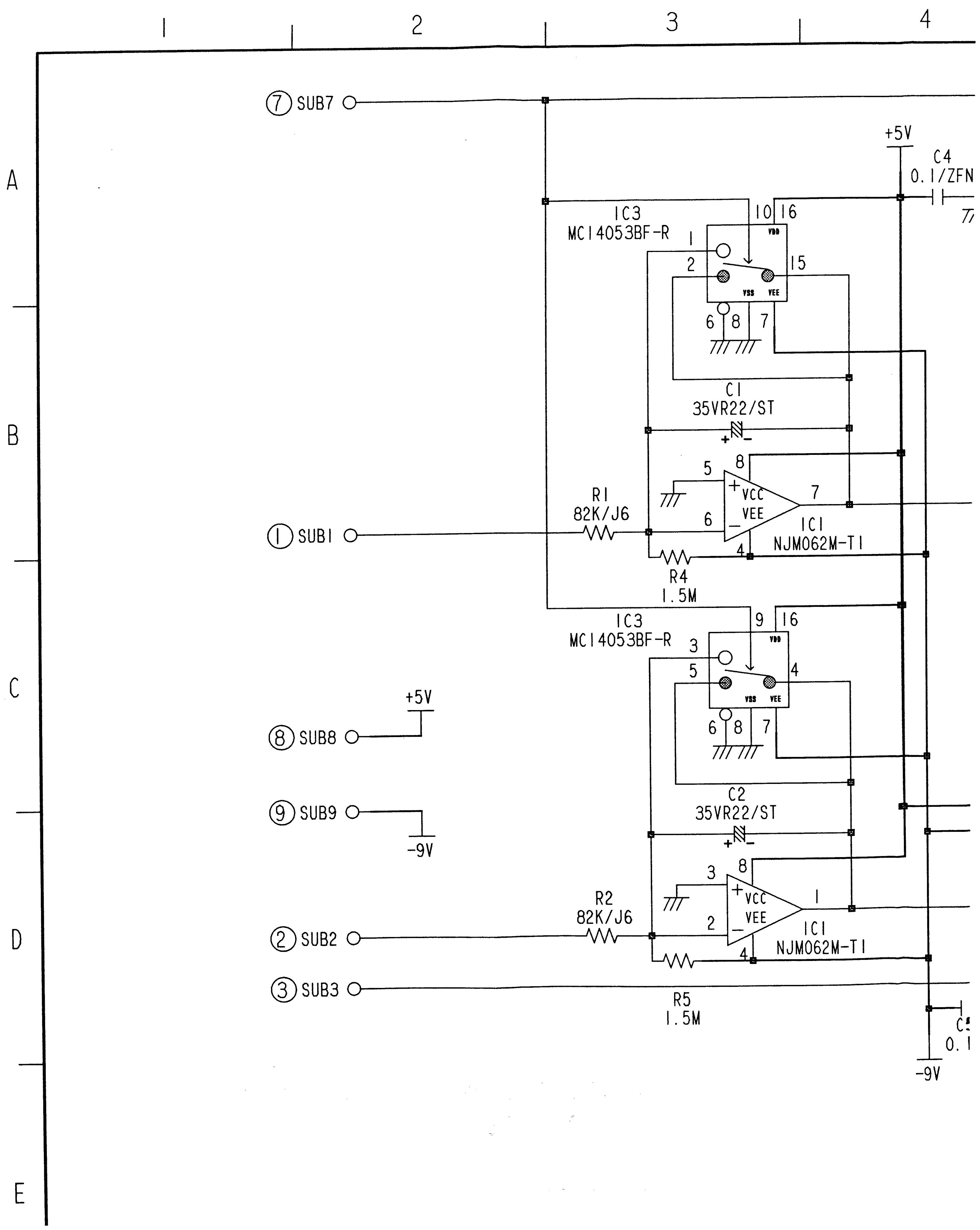
*=REFER TO THE COMPARISON CHART

Ref No.3600 Series.

REF	NTSC	PAL
R3543	*PAT/RE	*PAT/RE
R3544	*PAT/RE	*PAT/RE
R3547	*PAT/J3	*PAT/J3
R3548	*PAT/J3	*PAT/J3
R3549	*PAT/J3	*PAT/J3
R3550	*PAT/J3	*PAT/J3
R3551	*PAT/J3	*PAT/J3
R3552	*PAT/J3	*PAT/J3
R3557	*PAT/J3	*PAT/J3
R3559	*PAT/J3	*PAT/J3
R3564	*PAT/RE	*PAT/RE
R3565	*PAT/RE	*PAT/RE
R3568	*PAT/J3	*PAT/J3
R3569	*PAT/J3	*PAT/J3
R3570	*PAT/J3	*PAT/J3
R3571	*PAT/J3	*PAT/J3
R3572	*PAT/J3	*PAT/J3
R3573	*PAT/J3	*PAT/J3
R3576	*PAT/RE	*PAT/RE
R3577	*PAT/RE	*PAT/RE
R3578	*PAT/RE	*PAT/RE
R3579	*PAT/RE	*PAT/RE
R3580	*PAT/RE	*PAT/RE
R3582	*PAT/J3	*PAT/J3
R3583	*PAT/J3	*PAT/J3
R3584	*PAT/J3	*PAT/J3
R3585	*PAT/J3	*PAT/J3
R3586	*PAT/J3	*PAT/J3
R3592	*PAT/J3	*PAT/J3
R3593	*PAT/J3	*PAT/J3
R3594	*PAT/J3	*PAT/J3
R3595	*PAT/RE	*PAT/RE
R3596	*PAT/J3	*PAT/J3
R3597	*PAT/J3	*PAT/J3
R3598	*PAT/J3	*PAT/J3
R3639	*PAT/J3	5600/J3
R3759	*PAT/J3	*PAT/J3
R3760	*PAT/J3	*PAT/J3
R3761	*PAT/J3	*PAT/J3
R3802	*PAT/J3	*PAT/J3
R3812	0/J3	*PAT/J3
R3816	*PAT/J6	*PAT/J6
R3817	*PAT/J6	*PAT/J6
R3823	8200/J3	4700/J3
R3824	3300/J3	1800/J3
R3825	100/J3	0/J3

REF	NTSC	PAL
VR3003	*PAT/VR5	*PAT/VR5
VR3006	*PAT/VR5	*PAT/VR5
VR3202	*PAT/VR5	5K/VR5
VR3411	*PAT/VR5	*PAT/VR5
VR3412	*PAT/VR5	*PAT/VR5
VR3413	*PAT/VR5	*PAT/VR5
VR3417	*PAT/VR5	*PAT/VR5
VR3418	*PAT/VR5	*PAT/VR5
VR3419	*PAT/VR5	*PAT/VR5
X3002	VSX0338	VSX0270
X3003	VSX0081	VSX0114-B
X3600	*PAT	*PAT

D／S SUB SCHEMATIC DIAGRAM 1／1（E16:Page CBA-5）


1
2
3
4
A
B
C
D
E
⑦ SUB7
+5V
C4
0.1/ZFN
IC3
MC14053BF-R
VDD
VSS
VEE
C1
35VR22/ST
R1
82K/J6
① SUB1
VCC
VEE
IC1
NJM062M-T1
R4
1.5M
IC3
MC14053BF-R
+5V
⑧ SUB8
⑨ SUB9
-9V
C2
35VR22/ST
R2
82K/J6
IC1
NJM062M-T1
② SUB2
③ SUB3
R5
1.5M
-9V

PROCESS COMPARISON CHART（E15:Page CBA-10）

REF	NTSC	PAL
C3021	15P/UV	*PAT/UV
C3022	15P/UV	*PAT/UV
C3037	*PAT/UV	*PAT/UV
C3064	39P/UV	15P/UV
C3065	39P/UV	15P/UV
C3069	*PAT/UV	*PAT/UV
C3081	*PAT/UV	*PAT/UV
C3082	*PAT/UV	*PAT/UV
C3092	*PAT/UV	*PAT/UV
C3094	*PAT/UV	*PAT/UV
C3103	*PAT/UFV	0.1/UFV
C3104	*PAT/UFV	0.1/UFV
C3105	*PAT/UFV	0.1/UFV
C3115	*PAT/UFV	*PAT/UFV
C3118	*PAT/UFV	0.1/UFV
C3119	*PAT/EVV	6V33/EVV
C3120	*PAT/UFV	0.1/UFV
C3121	*PAT/UFV	*PAT/UFV
C3122	*PAT/UFV	0.1/UFV
C3204	*PAT/UV	*PAT/UV
C3206	*PAT/UV	*PAT/UV
C3208	*PAT/UV	*PAT/UV
C3234	33P/UV	27P/UV
C3236	27P/UV	18P/UV
C3237	7P/UV	*PAT/UV
C3238	27P/UV	18P/UV
C3239	*PAT/UV	*PAT/UV
C3242	33P/UV	27P/UV
C3243	12P/UV	10P/UV
C3244	33P/UV	27P/UV
C3248	*PAT/UV	*PAT/UV
C3249	*PAT/UV	*PAT/UV
C3250	*PAT/UV	*PAT/UV
C3251	*PAT/UV	*PAT/UV
C3252	*PAT/UV	*PAT/UV
C3253	*PAT/UV	*PAT/UV
C3254	*PAT/UV	*PAT/UV
C3255	*PAT/UV	*PAT/UV
C3256	*PAT/UV	*PAT/UV
C3257	*PAT/UV	*PAT/UV
C3258	*PAT/UV	*PAT/UV
C3411	*PAT/EVV	*PAT/EVV
C3412	*PAT/EVV	*PAT/EVV
C3413	*PAT/UBV	*PAT/UBV
C3493	*PAT/UV	*PAT/UV
C3495	*PAT/EVN	*PAT/EVN

REF	NTSC	PAL
C3496	*PAT/UBN	*PAT/UBN
C3497	*PAT/EVN	*PAT/EVN
C3498	*PAT/UV	*PAT/UV
C3500	*PAT/EVN	*PAT/EVN
C3501	*PAT/UBN	*PAT/UBN
C3502	*PAT/EVN	*PAT/EVN
C3503	*PAT/UV	*PAT/UV
C3505	*PAT/EVN	*PAT/EVN
C3506	*PAT/UBN	*PAT/UBN
C3507	*PAT/EVN	*PAT/EVN
C3511	*PAT/UFV	*PAT/UFV
C3512	*PAT/UFV	*PAT/UFV
C3513	*PAT/UFV	*PAT/UFV
C3514	*PAT/UFV	*PAT/UFV
C3515	*PAT/UFV	*PAT/UFV
C3516	*PAT/UFV	*PAT/UFV
C3517	*PAT/EVV	*PAT/EVV
C3518	*PAT/UFV	*PAT/UFV
C3519	*PAT/UFV	*PAT/UFV
C3520	*PAT/UFV	*PAT/UFV
C3524	*PAT/UFV	*PAT/UFV
C3525	*PAT/UV	*PAT/UV
C3526	*PAT/UV	*PAT/UV
C3539	*PAT/EVN	*PAT/EVN
C3540	*PAT/EVN	*PAT/EVN
C3541	*PAT/EVN	*PAT/EVN
C3627	*PAT/UFV	*PAT/UFV
C3628	*PAT/UFV	*PAT/UFV
C3745	*PAT/UV	*PAT/UV
C3746	*PAT/UV	*PAT/UV
C3747	*PAT/UV	*PAT/UV
C3748	220P/UV	*PAT/UV
C3749	100P/UV	*PAT/UV
C3750	*PAT/UV	*PAT/UV
C3752	*PAT/UV	*PAT/UV
C3768	18P/UV	33P/UV
C3769	120P/UV	270P/UV
C3784	12P/UV	*PAT/UV
C3788	*PAT/UV	*PAT/UV
C3789	*PAT/UV	*PAT/UV
C3807	*PAT/UV	*PAT/UV
D3006	*PAT	*PAT
IC3026	*PAT	SN7HC74ABL
IC3027	*PAT	SN7HC00ABL
IC3403	*PAT	*PAT
IC3404	*PAT	*PAT

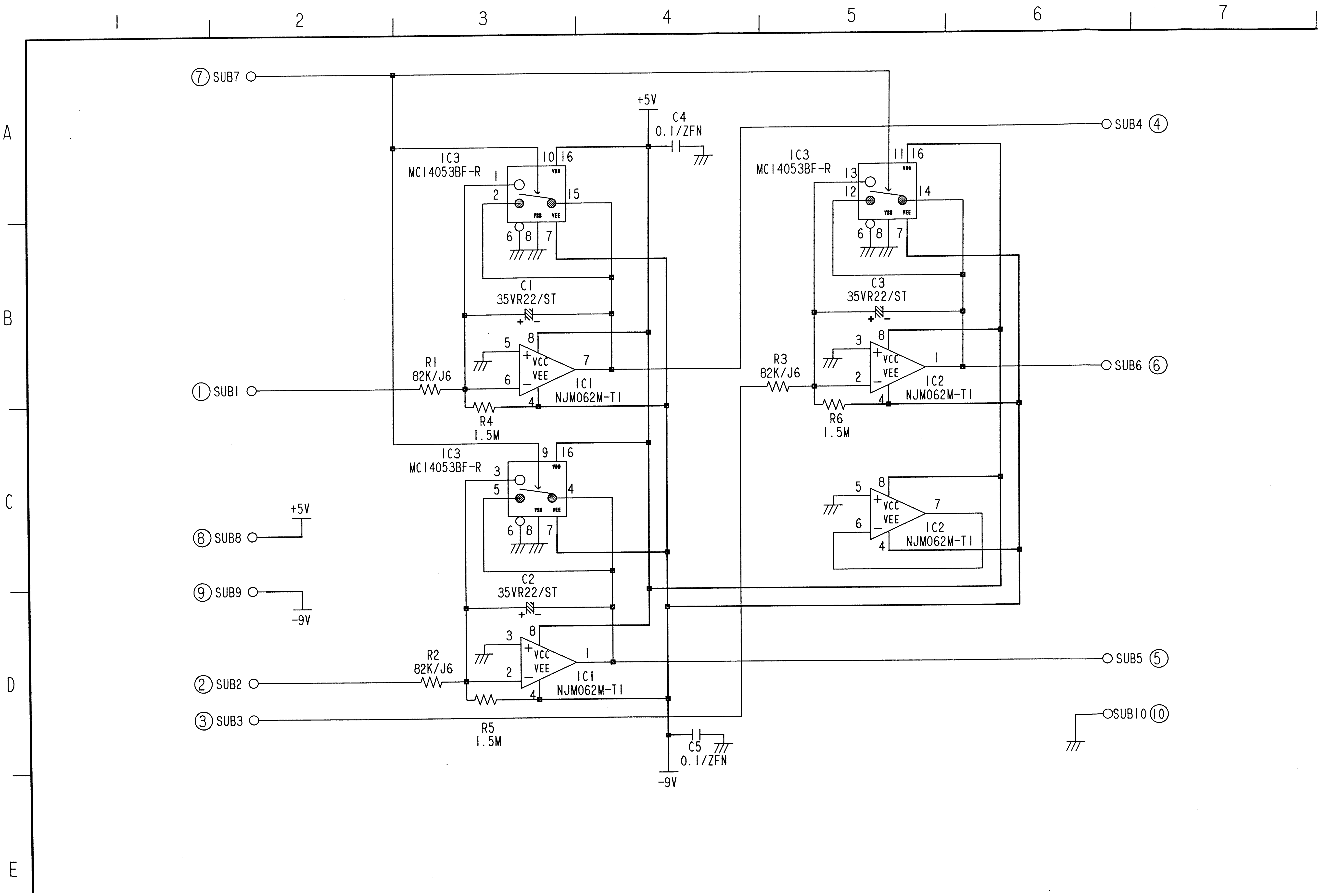
====================================

REF	NTSC	PAL
IC3408	*PAT	*PAT
IC3409	*PAT	*PAT
IC3410	*PAT	*PAT
IC3411	*PAT	*PAT
IC3614	*PAT	*PAT
L3003	68U/LA	39U/LA
L3100	*PAT/LC	100U/LC
L3101	*PAT/LC	100U/LC
L3206	15U/LA	12U/LA
L3207	*PAT/LA	*PAT/LA
L3208	*PAT/LA	*PAT/LA
L3209	*PAT/LA	*PAT/LA
L3210	*PAT/LA	*PAT/LA
L3423	*PAT/LA	*PAT/LA
L3705	47U/LA	100U/LA
Q3101	*PAT	2SB1218A-TW
Q3102	*PAT	2SD1819A-TW
Q3413	*PAT	*PAT
Q3415	*PAT	*PAT
Q3420	*PAT	*PAT
Q3422	*PAT	*PAT
Q3427	*PAT	*PAT
Q3429	*PAT	*PAT
R3026	*PAT/J3	*PAT/J3
R3027	*PAT/J3	*PAT/J3
R3035	10K/J3	15K/J3
R3036	15K/J3	10K/J3
R3050	*PAT/J3	*PAT/J3
R3066	*PAT/J3	*PAT/J3
R3067	*PAT/J3	*PAT/J3
R3073	*PAT/J3	*PAT/J3
R3075	*PAT/J3	0/J3
R3076	0/J3	*PAT/J3
R3077	*PAT/J3	0/J3
R3078	*PAT/J3	0/J3
R3079	*PAT/J3	*PAT/J3
R3081	0/J3	*PAT/J3
R3082	*PAT/J3	0/J3
R3084	*PAT/J3	*PAT/J3
R3090	*PAT/J3	*PAT/J3
R3091	*PAT/J3	*PAT/J3
R3105	*PAT/J3	*PAT/J3
R3106	0/J3	*PAT/J3
R3107	*PAT/J3	*PAT/J3
R3108	*PAT/J3	*PAT/J3
R3114	47K/RE	82K/RE

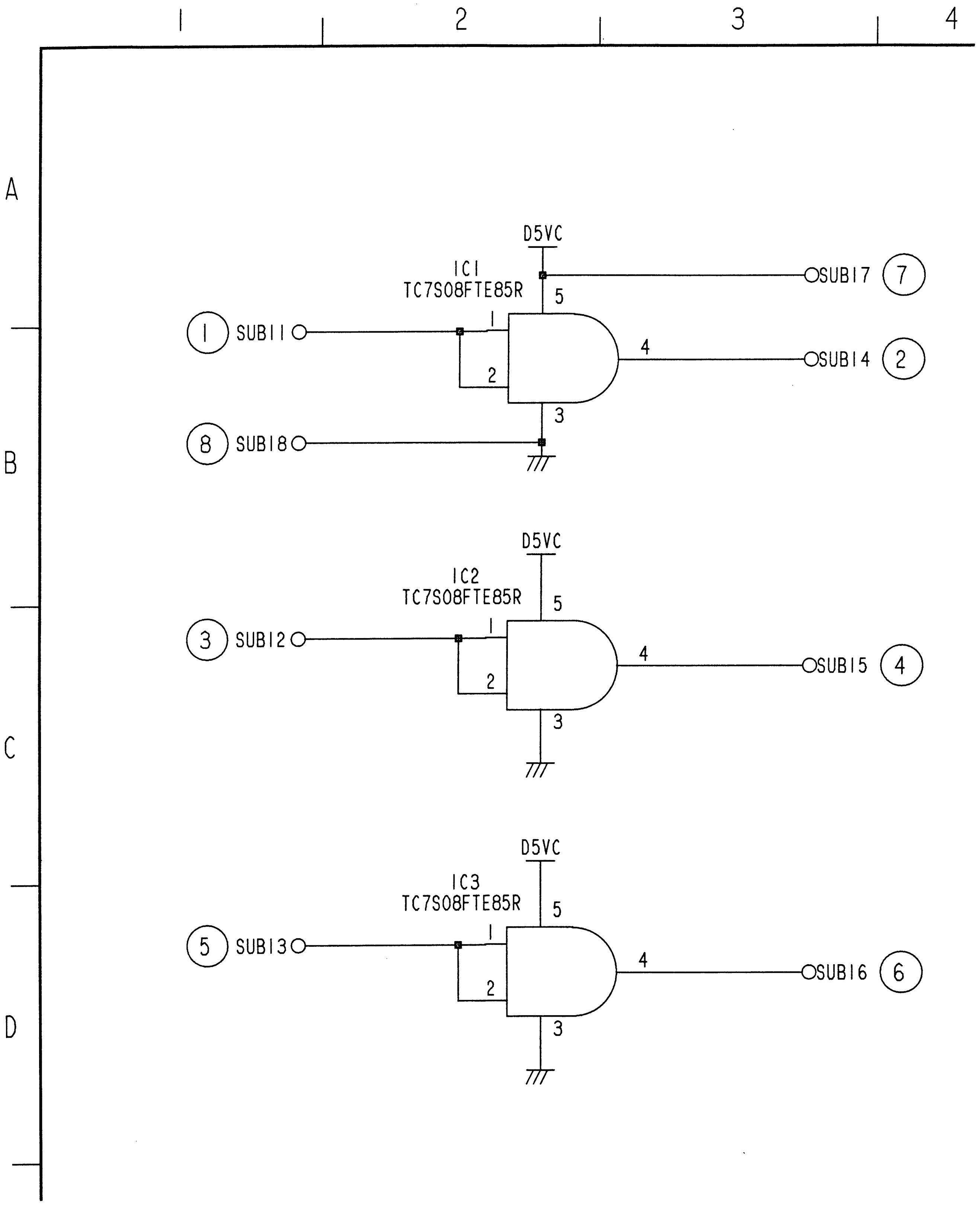
====================================

REF	NTSC	PAL
R3116	*PAT/J3	*PAT/J3
R3119	*PAT/J3	*PAT/J3
R3120	*PAT/J3	*PAT/J3
R3121	*PAT/J3	*PAT/J3
R3122	*PAT/J3	*PAT/J3
R3123	0/J3	*PAT/J3
R3124	0/J3	*PAT/J3
R3125	*PAT/J3	*PAT/J3
R3129	*PAT/J3	1000/J3
R3130	*PAT/J3	68/J3
R3131	*PAT/J3	3R9/J3
R3132	*PAT/J3	3300/J3
R3133	*PAT/J3	680
R3137	*PAT/J3	*PAT/J3
R3138	*PAT/J3	*PAT/J3
R3139	*PAT/J3	0/J3
R3140	0/J3	*PAT/J3
R3141	*PAT/J3	0/J3
R3142	0/J3	*PAT/J3
R3143	0/J3	*PAT/J3
R3214	*PAT/J3	*PAT/J3
R3221	*PAT/J3	*PAT/J3
R3222	*PAT/J3	0/J3
R3223	0/J3	*PAT/J3
R3257	*PAT/J3	*PAT/J3
R3418	*PAT/J3	*PAT/J3
R3419	*PAT/J3	*PAT/J3
R3420	*PAT/J3	*PAT/J3
R3421	*PAT/J3	*PAT/J3
R3422	*PAT/J3	*PAT/J3
R3423	*PAT/J3	*PAT/J3
R3430	*PAT/J3	*PAT/J3
R3431	*PAT/J3	*PAT/J3
R3432	*PAT/J3	*PAT/J3
R3515	*PAT/J3	*PAT/J3
R3517	*PAT/J3	*PAT/J3
R3522	*PAT/RE	*PAT/RE
R3523	*PAT/RE	*PAT/RE
R3526	*PAT/J3	*PAT/J3
R3527	*PAT/J3	*PAT/J3
R3528	*PAT/J3	*PAT/J3
R3529	*PAT/J3	*PAT/J3
R3530	*PAT/J3	*PAT/J3
R3531	*PAT/J3	*PAT/J3
R3536	*PAT/J3	*PAT/J3
R3538	*PAT/J3	*PAT/J3

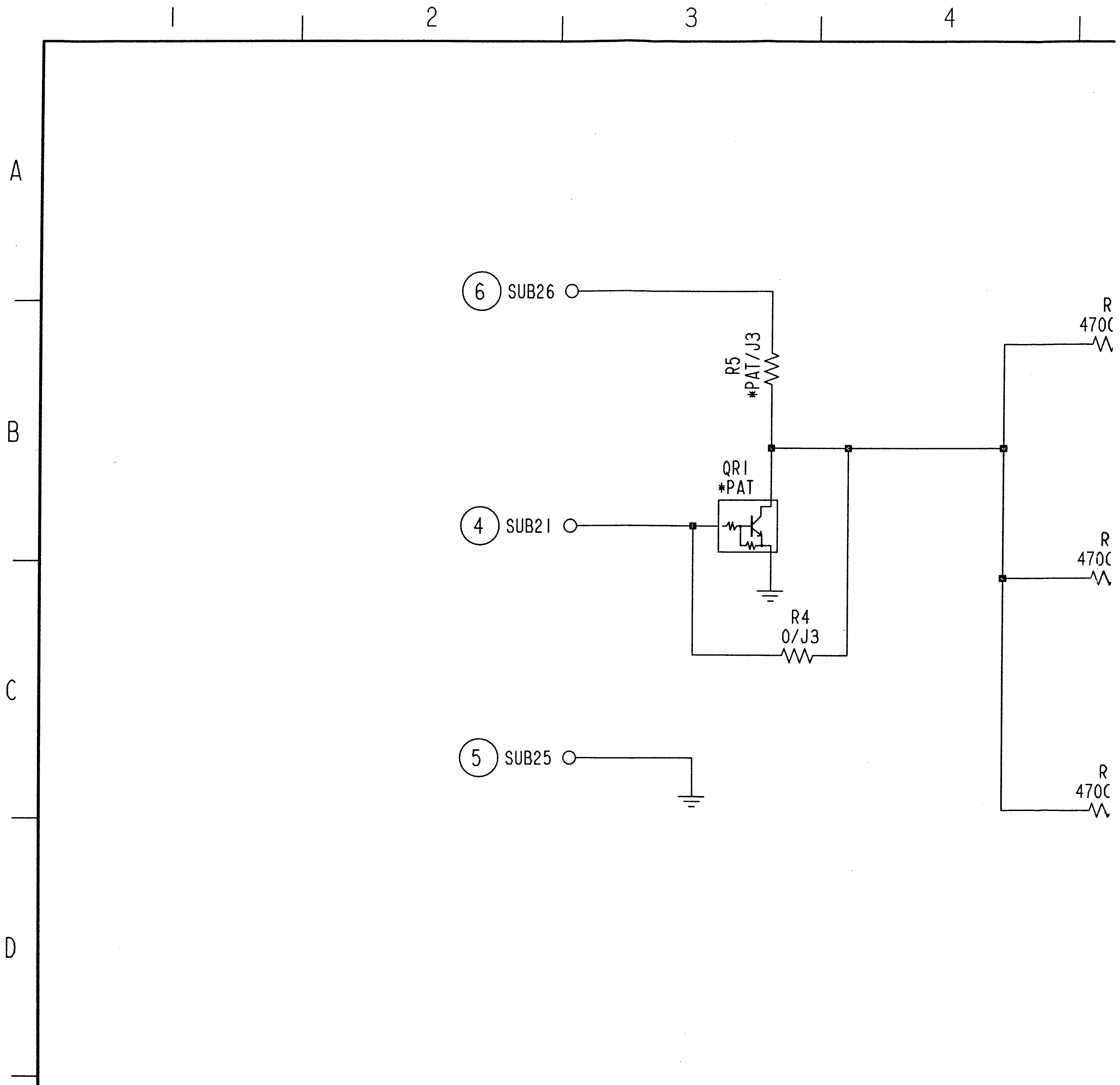
D／S SUB SCHEMATIC DIAGRAM 1／1（E16:Page CBA-5）


1
2
3
4
5
6
7
A
B
C
D
E
⑦ SUB7
+5V
C4
0.1/ZFN
SUB4 ④
IC3
MC14053BF-R
10
16
1
2
15
VDD
VSS
VEE
6
8
7
C1
35VR22/ST
5
8
7
6
4
VCC
VEE
R1
82K/J6
IC1
NJM062M-T1
① SUB1
R4
1.5M
IC3
MC14053BF-R
11
16
13
12
14
6
8
7
C3
35VR22/ST
3
8
1
2
4
R3
82K/J6
IC2
NJM062M-T1
SUB6 ⑥
R6
1.5M
IC3
MC14053BF-R
9
16
3
5
4
6
8
7
+5V
⑧ SUB8
⑨ SUB9
-9V
C2
35VR22/ST
3
8
1
2
4
R2
82K/J6
IC1
NJM062M-T1
② SUB2
③ SUB3
R5
1.5M
C5
0.1/ZFN
-9V
5
8
7
6
4
IC2
NJM062M-T1
SUB5 ⑤
SUB10 ⑩

CAM BUFFER SCHEMATIC DIAGRAM 1／1 (E17:Page CBA-4)


1
2
3
4
A
B
C
D
D5VC
IC1
TC7S08FTE85R
① SUB11
SUB17 ⑦
SUB14 ②
⑧ SUB18
IC2
TC7S08FTE85R
③ SUB12
SUB15 ④
IC3
TC7S08FTE85R
⑤ SUB13
SUB16 ⑥
1
2
3
4
5

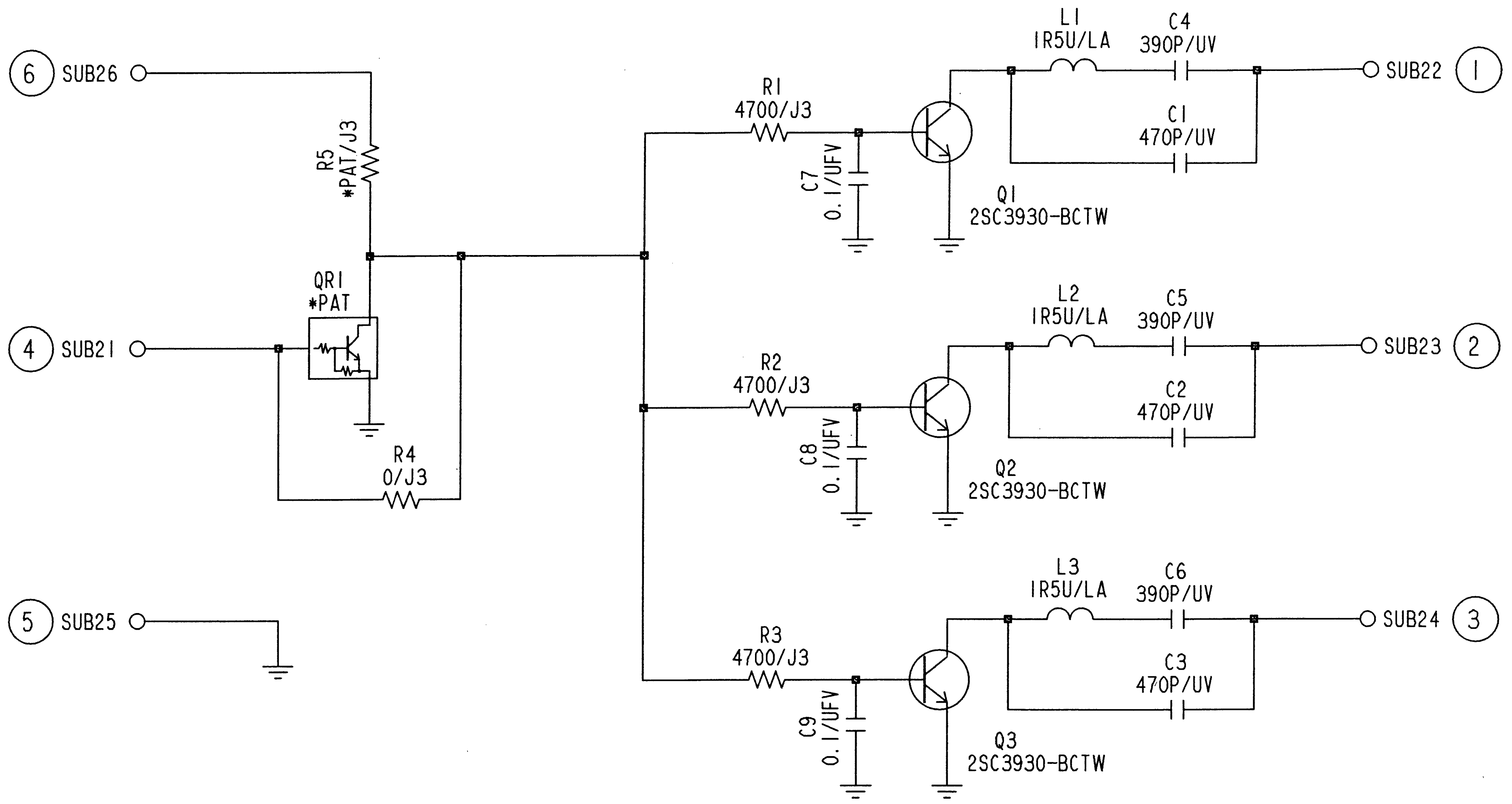
D SUB 2 SCHEMATIC DIAGRAM 1／1 (E18:Page CBA-5)


1
2
3
4
A
B
C
D
⑥ SUB26
R5
*PAT/J3
QR1
*PAT
④ SUB21
R4
0/J3
⑤ SUB25
R
470
R
470
R
470

D SUB 2 COMPARISON CHART
(E18:Page CBA-5)

REF	NTSC	PAL
QR1	*PAT	*PAT
R5	*PAT/J3	*PAT/J3

D SUB 2 SCHEMATIC DIAGRAM 1／1 (E18:Page CBA-5)

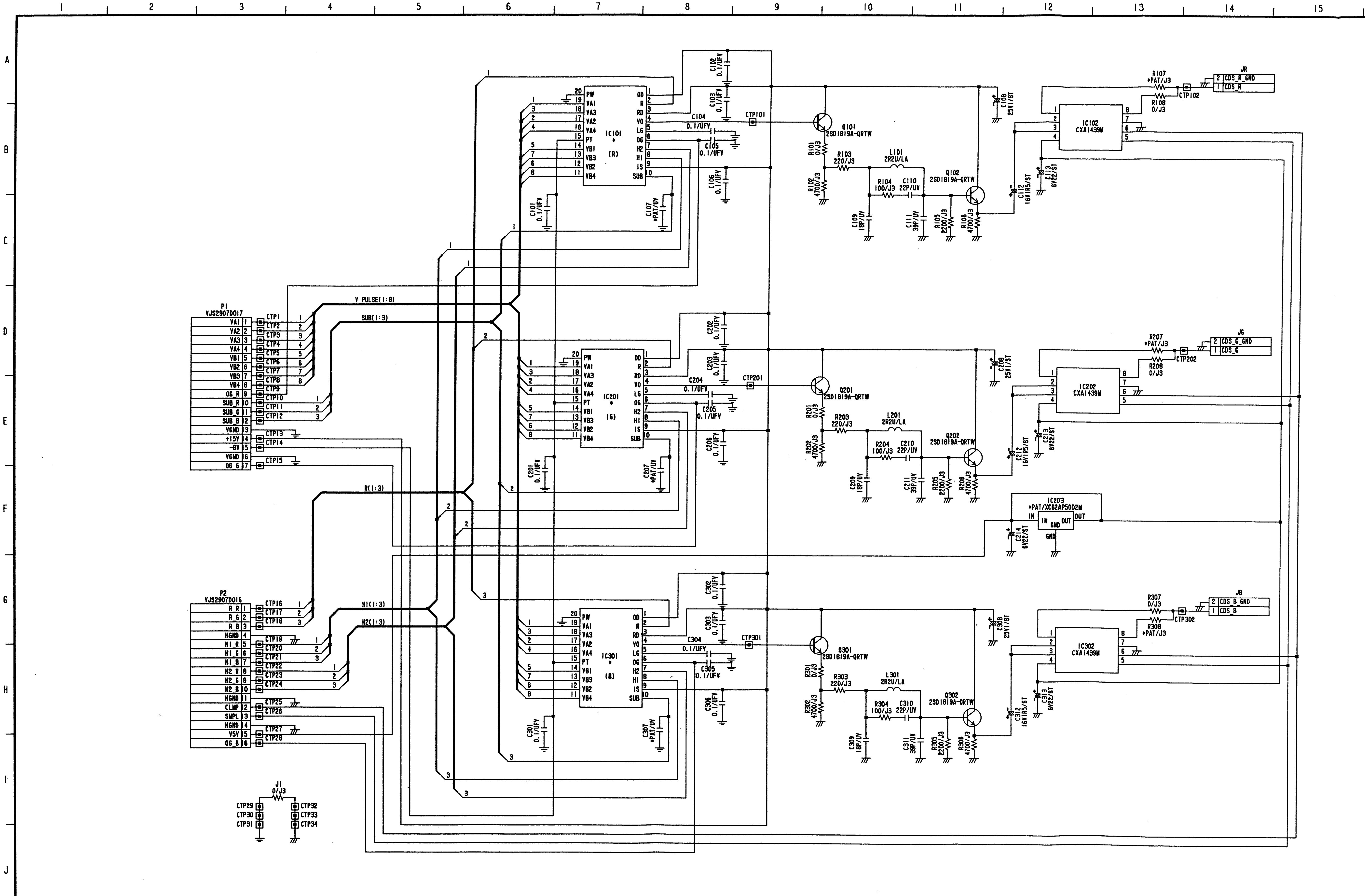

⑥ SUB26
④ SUB21
⑤ SUB25
R5
*PAT/J3
QR1
*PAT
R4
0/J3
R1
4700/J3
R2
4700/J3
R3
4700/J3
C7
0.1/UFV
C8
0.1/UFV
C9
0.1/UFV
Q1
2SC3930-BCTW
Q2
2SC3930-BCTW
Q3
2SC3930-BCTW
L1
1R5U/LA
L2
1R5U/LA
L3
1R5U/LA
C4
390P/UV
C5
390P/UV
C6
390P/UV
C1
470P/UV
C2
470P/UV
C3
470P/UV
SUB22 ①
SUB23 ②
SUB24 ③

*PAT=PATTERN ONLY

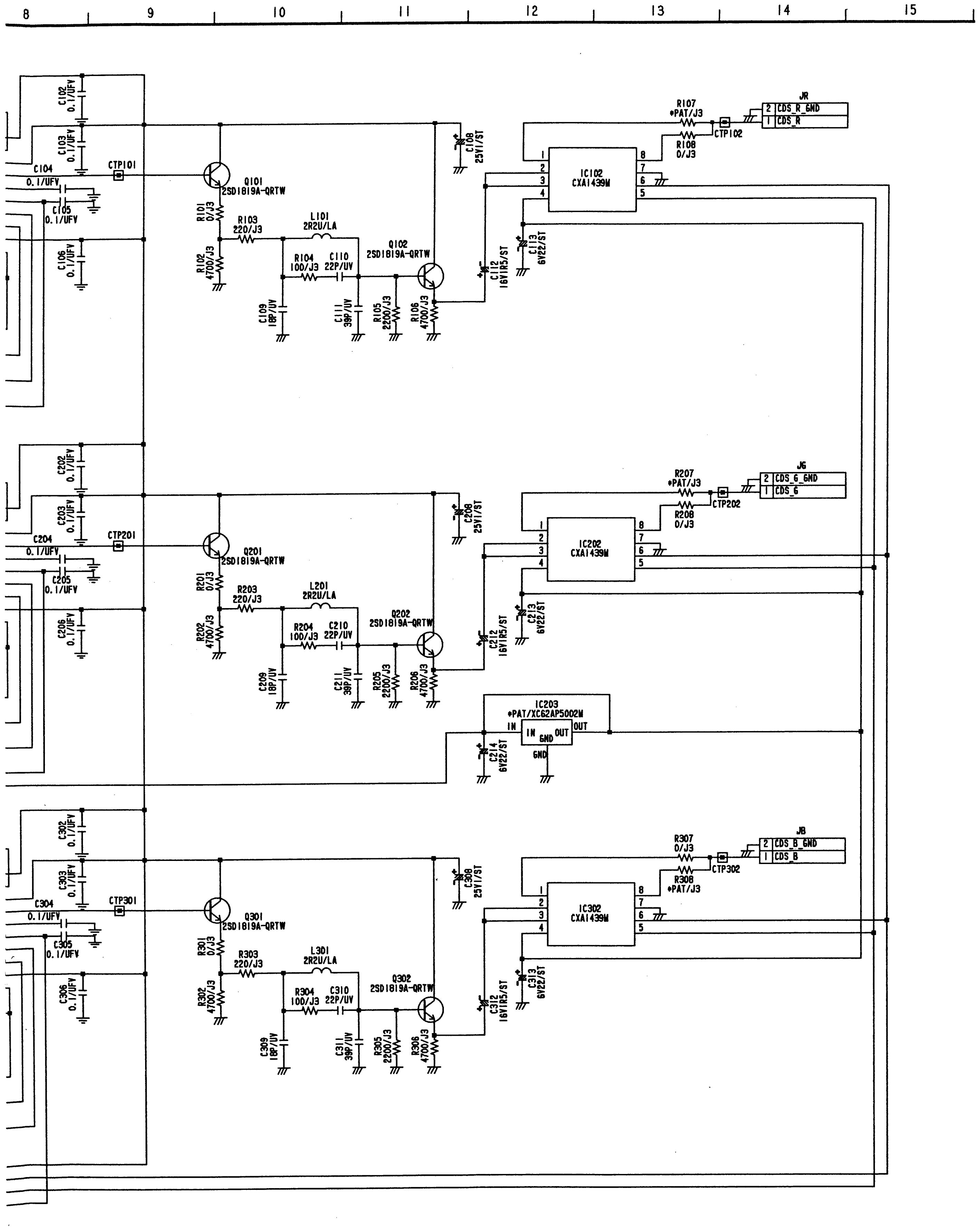
D SUB 2 COMPARISON CHART
(E18:Page CBA-5)

REF	NTSC	PAL
QR1	*PAT	*PAT
R5	*PAT/J3	*PAT/J3

CCD SCHEMATIC DIAGRAM 1／1


P1
VJS2907D017
VA1
VA2
VA3
VA4
VB1
VB2
VB3
VB4
OG_R
SUB_R
SUB_G
SUB_B
VGND
+15V
-8V
VGND
OG_G
CTP1
CTP2
CTP3
CTP4
CTP5
CTP6
CTP7
CTP8
CTP9
CTP10
CTP11
CTP12
CTP13
CTP14
CTP15
V_PULSE(1:8)
SUB(1:3)
R(1:3)
H1(1:3)
H2(1:3)
P2
VJS2907D016
R_R
R_G
R_B
HGND
H1_R
H1_G
H1_B
H2_R
H2_G
H2_B
HGND
CLMP
SMPL
HGND
V5V
OG_B
CTP16
CTP17
CTP18
CTP19
CTP20
CTP21
CTP22
CTP23
CTP24
CTP25
CTP26
CTP27
CTP28
J1
0/J3
CTP29
CTP30
CTP31
CTP32
CTP33
CTP34
IC101
(R)
IC201
(G)
IC301
(B)
PW
VA1
VA2
VA3
VA4
PT
VB1
VB3
VB2
VB4
OD
R
RD
VO
LG
OG
H2
H1
IS
SUB
C101 0.1/UFV
C102 0.1/UFV
C103 0.1/UFV
C104 0.1/UFV
C105 0.1/UFV
C106 0.1/UFV
C107 *PAT/UV
CTP101
Q101 2SD1819A-QRTW
R101 0/J3
R102 4700/J3
R103 220/J3
L101 2R2U/LA
R104 100/J3
C110 22P/UV
C109 18P/UV
C111 39P/UV
R105 2200/J3
R106 4700/J3
Q102 2SD1819A-QRTW
C108 25V1/ST
C112 16V1R5/ST
C113 6V22/ST
IC102 CXA1439M
R107 *PAT/J3
R108 0/J3
CTP102
JR
CDS_R_GND
CDS_R
C201 0.1/UFV
C202 0.1/UFV
C203 0.1/UFV
C204 0.1/UFV
C205 0.1/UFV
C206 0.1/UFV
C207 *PAT/UV
CTP201
Q201 2SD1819A-QRTW
R201 0/J3
R202 4700/J3
R203 220/J3
L201 2R2U/LA
R204 100/J3
C210 22P/UV
C209 18P/UV
C211 39P/UV
R205 2200/J3
R206 4700/J3
Q202 2SD1819A-QRTW
C208 25V1/ST
C212 16V1R5/ST
C213 6V22/ST
IC202 CXA1439M
R207 *PAT/J3
R208 0/J3
CTP202
JG
CDS_G_GND
CDS_G
IC203
*PAT/XC62AP5002M
IN
OUT
GND
C214 6V22/ST
C301 0.1/UFV
C302 0.1/UFV
C303 0.1/UFV
C304 0.1/UFV
C305 0.1/UFV
C306 0.1/UFV
C307 *PAT/UV
CTP301
Q301 2SD1819A-QRTW
R301 0/J3
R302 4700/J3
R303 220/J3
L301 2R2U/LA
R304 100/J3
C310 22P/UV
C309 18P/UV
C311 39P/UV
R305 2200/J3
R306 4700/J3
Q302 2SD1819A-QRTW
C308 25V1/ST
C312 16V1R5/ST
C313 6V22/ST
IC302 CXA1439M
R307 0/J3
R308 *PAT/J3
CTP302
JB
CDS_B_GND
CDS_B

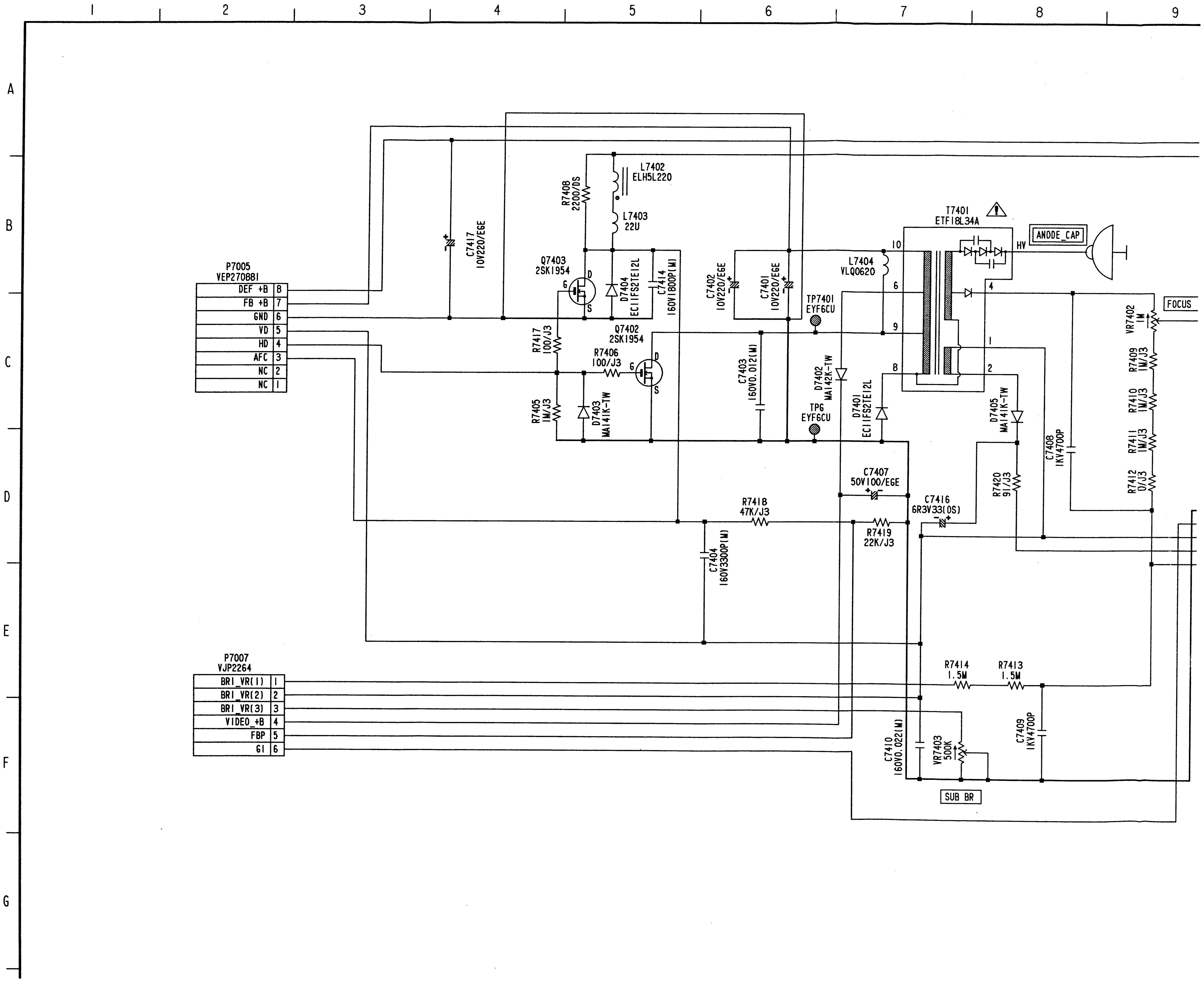
IC101, IC102, IC103	
NTSC	MN3752AE-V
PAL	MN3762AE-V


8
9
10
11
12
13
14
15
C102 0.1/UFV
C103 0.1/UFV
C104 0.1/UFV
CTP101
C105 0.1/UFV
C106 0.1/UFV
Q101 2SD1819A-QRTW
R101 0/J3
R103 220/J3
L101 2R2U/LA
R102 4700/J3
R104 100/J3
C110 22P/UV
Q102 2SD1819A-QRTW
C109 18P/UV
C111 39P/UV
R105 2200/J3
R106 4700/J3
C108 25V1/ST
C112 16V1R5/ST
C113 6V22/ST
IC102 CXA1439M
R107 *PAT/J3
R108 0/J3
CTP102
JR
2 CDS_R_GND
1 CDS_R
C202 0.1/UFV
C203 0.1/UFV
C204 0.1/UFV
CTP201
C205 0.1/UFV
C206 0.1/UFV
Q201 2SD1819A-QRTW
R201 0/J3
R203 220/J3
L201 2R2U/LA
R202 4700/J3
R204 100/J3
C210 22P/UV
Q202 2SD1819A-QRTW
C209 18P/UV
C211 39P/UV
R205 2200/J3
R206 4700/J3
C208 25V1/ST
C212 16V1R5/ST
C213 6V22/ST
IC202 CXA1439M
R207 *PAT/J3
R208 0/J3
CTP202
JG
2 CDS_G_GND
1 CDS_G
IC203 *PAT/XC62AP5002M
IN
OUT
GND
C214 6V22/ST
C302 0.1/UFV
C303 0.1/UFV
C304 0.1/UFV
CTP301
C305 0.1/UFV
C306 0.1/UFV
Q301 2SD1819A-QRTW
R301 0/J3
R303 220/J3
L301 2R2U/LA
R302 4700/J3
R304 100/J3
C310 22P/UV
Q302 2SD1819A-QRTW
C309 18P/UV
C311 39P/UV
R305 2200/J3
R306 4700/J3
C308 25V1/ST
C312 16V1R5/ST
C313 6V22/ST
IC302 CXA1439M
R307 0/J3
R308 *PAT/J3
CTP302
JB
2 CDS_B_GND
1 CDS_B

CCD COMPARISON CHART

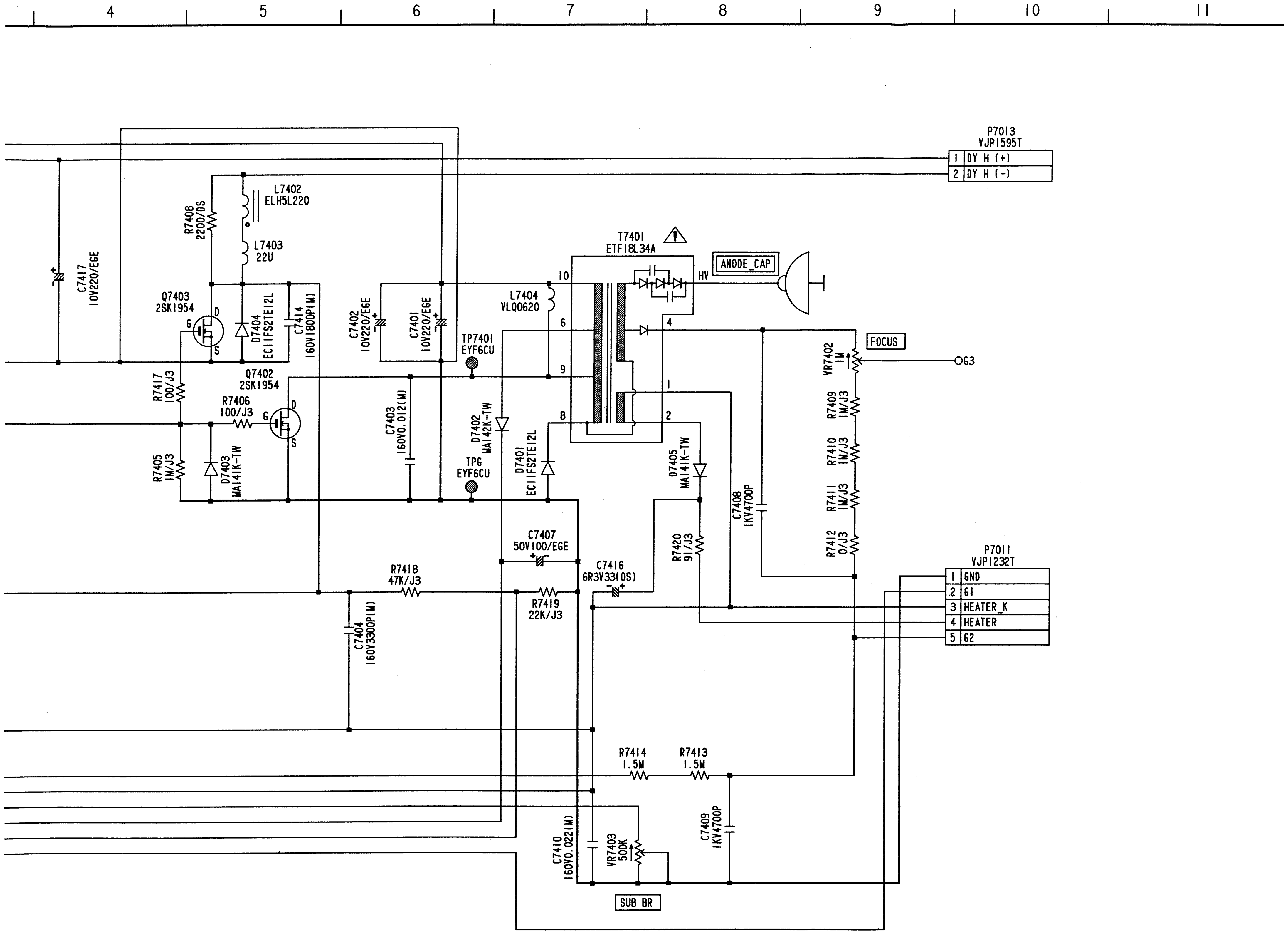
REF	NTSC	PAL
C107	*PAT/UV	*PAT/UV
C207	*PAT/UV	*PAT/UV
IC101	MN3752AE-V	MN3762AE-V
IC201	MN3752AE-V	MN3762AE-V
IC301	MN3752AE-V	MN3762AE-V
C307	*PAT/UV	*PAT/UV
IC203	*PAT	*PAT
R107	*PAT/J3	*PAT/J3
R207	*PAT/J3	*PAT/J3
R308	*PAT/J3	*PAT/J3

H DEF SCHEMATIC DIAGRAM 1／1（E1:Page CBA-3）



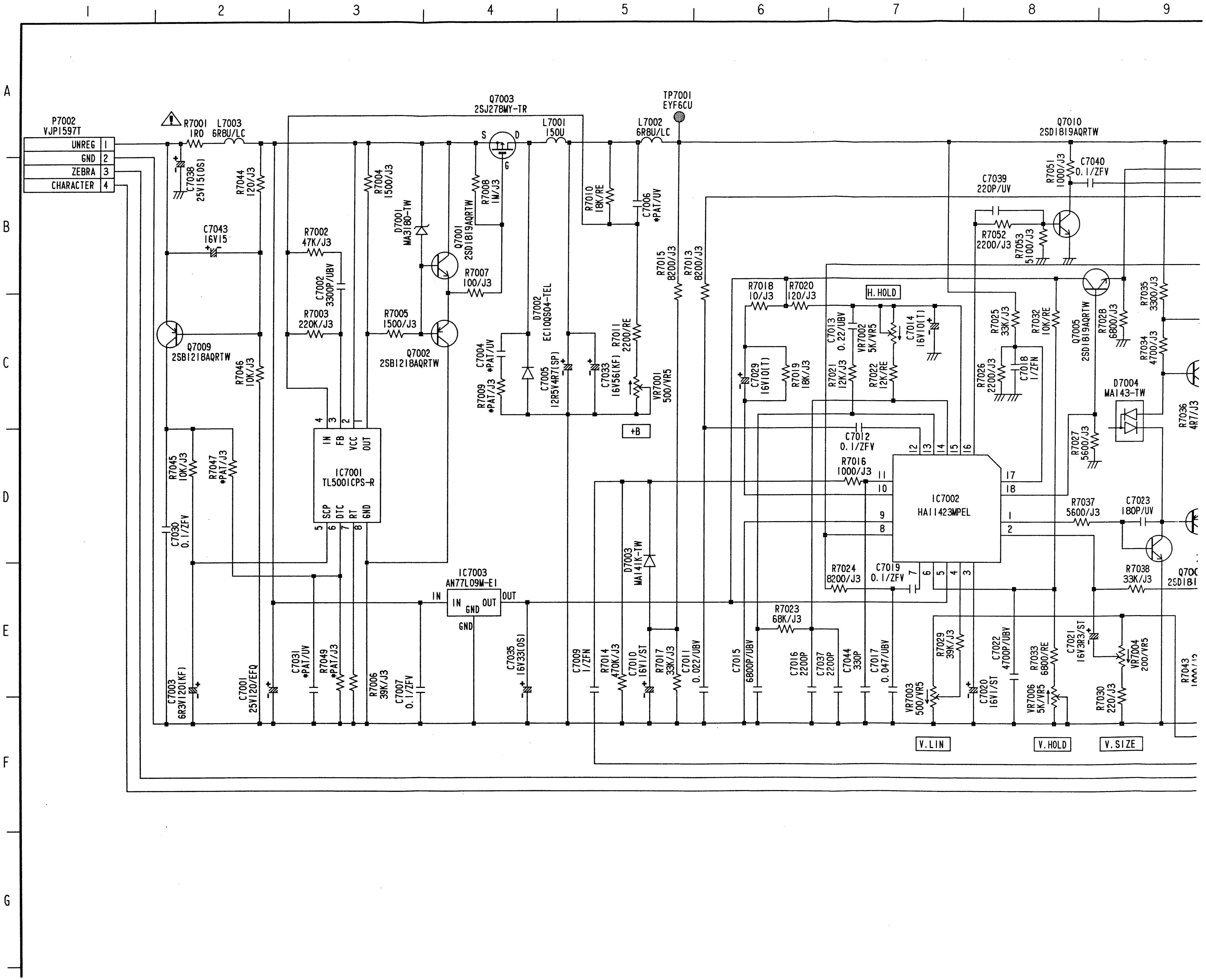
1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
P7005
VEP27088I
DEF +B 8
FB +B 7
GND 6
VD 5
HD 4
AFC 3
NC 2
NC 1
C7417
10V220/EGE
R7408
2200/DS
L7402
ELH5L220
L7403
22U
Q7403
2SK1954
G
D
S
D7404
EC11FS2TE12L
C7414
160V1800P(M)
C7402
10V220/EGE
C7401
10V220/EGE
TP7401
EYF6CU
L7404
VLQ0620
T7401
ETF18L34A
ANODE_CAP
HV
10
6
9
8
4
1
2
FOCUS
VR7402
1M
R7417
100/J3
Q7402
2SK1954
R7406
100/J3
R7405
1M/J3
D7403
MA141K-TW
C7403
160V0.012(M)
D7402
MA142K-TW
TPG
EYF6CU
D7401
EC11FS2TE12L
D7405
MA141K-TW
C7408
1KV4700P
R7409
1M/J3
R7410
1M/J3
R7411
1M/J3
R7412
0/J3
R7420
91/J3
C7407
50V100/EGE
C7416
6R3V33(OS)
R7418
47K/J3
R7419
22K/J3
C7404
160V3300P(M)
P7007
VJP2264
BRI_VR(1) 1
BRI_VR(2) 2
BRI_VR(3) 3
VIDEO_+B 4
FBP 5
G1 6
R7414
1.5M
R7413
1.5M
C7410
160V0.022(M)
VR7403
500K
C7409
1KV4700P
SUB BR

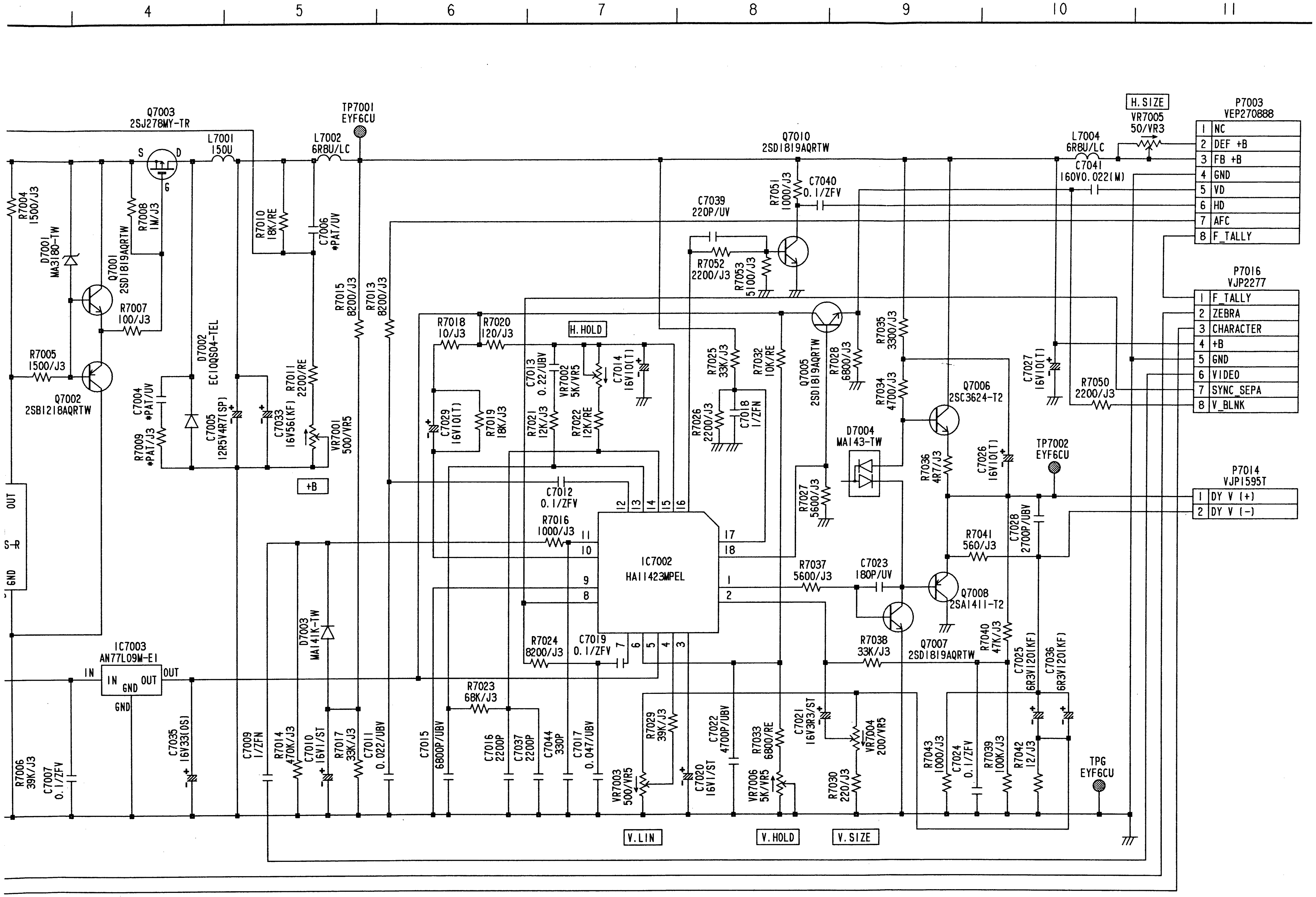
1:Page CBA-3)


4
5
6
7
8
9
10
11
P7013
VJP1595T
1 DY H (+)
2 DY H (-)
L7402
ELH5L220
R7408
2200/DS
L7403
22U
C7417
10V220/EGE
Q7403
2SK1954
D7404
EC11FS2TE12L
C7414
160V1800P(M)
C7402
10V220/EGE
C7401
10V220/EGE
T7401
ETF18L34A
ANODE_CAP
HV
L7404
VLQ0620
TP7401
EYF6CU
FOCUS
VR7402
1M
G3
R7417
100/J3
Q7402
2SK1954
R7406
100/J3
C7403
160V0.012(M)
D7402
MA142K-TW
D7401
EC11FS2TE12L
D7405
MA141K-TW
R7409
1M/J3
R7410
1M/J3
R7411
1M/J3
R7412
0/J3
R7405
1M/J3
D7403
MA141K-TW
TP6
EYF6CU
C7408
1KV4700P
C7407
50V100/EGE
C7416
6R3V33(OS)
R7420
91/J3
P7011
VJP1232T
1 GND
2 G1
3 HEATER_K
4 HEATER
5 G2
R7418
47K/J3
R7419
22K/J3
C7404
160V3300P(M)
R7414
1.5M
R7413
1.5M
C7409
1KV4700P
C7410
160V0.022(M)
VR7403
500K
SUB BR
10
6
9
8
4
1
2
G
D
S

*=REFER TO THE COMPARISON CHART
Ref No.7400 Series.

V DEF SCHEMATIC DIAGRAM 1／1（E2:Page CBA-3）

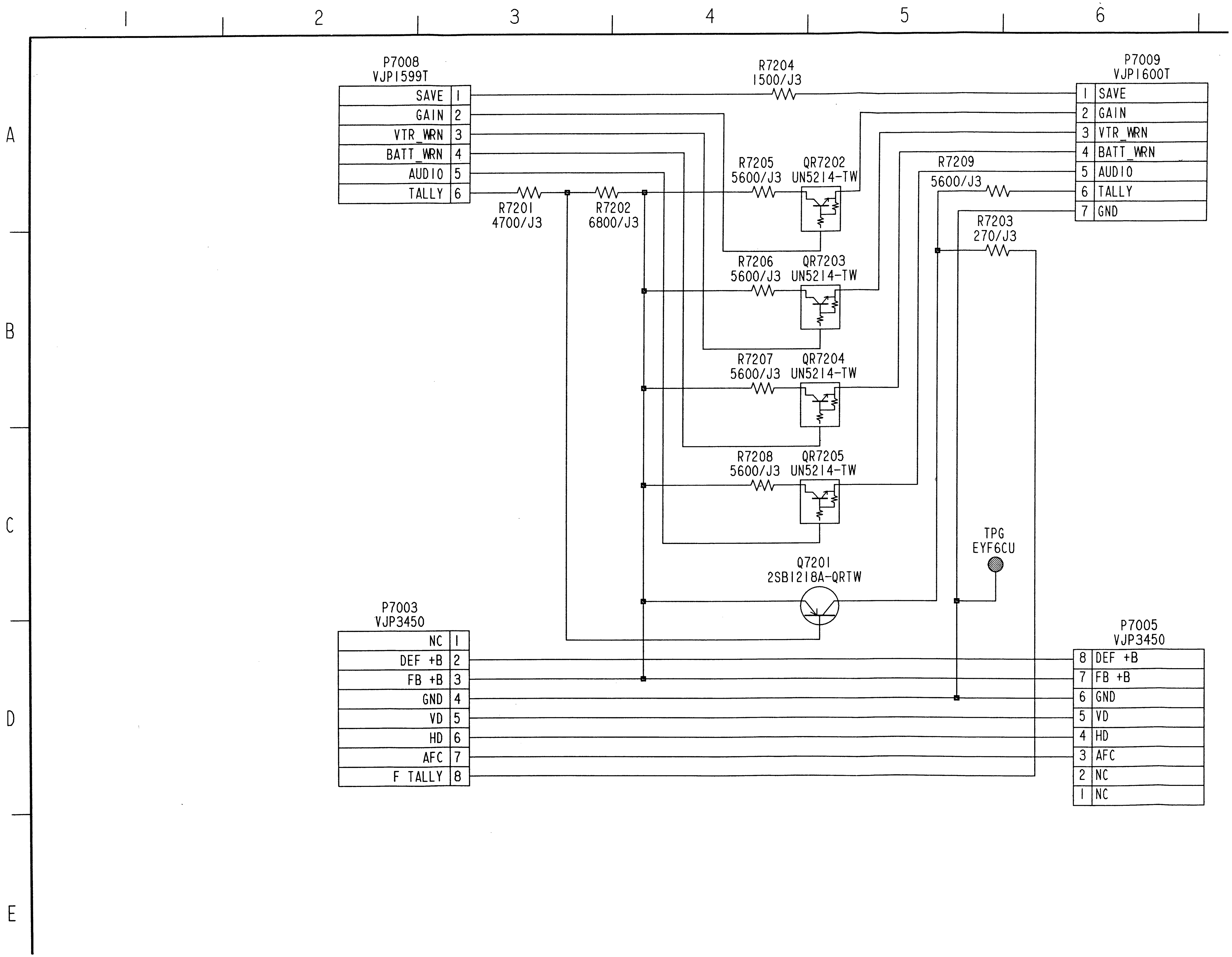

1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
P7002
VJP1597T
UNREG 1
GND 2
ZEBRA 3
CHARACTER 4
R7001
1R0
L7003
6R8U/LC
C7038
25V15(OS)
R7044
120/J3
C7043
16V15
Q7009
2SB1218AQRTW
R7046
10K/J3
R7045
10K/J3
R7047
*PAT/J3
C7030
0.1/ZFV
C7003
6R3V120(KF)
C7001
25V120/EFQ
R7002
47K/J3
C7002
3300P/UBV
R7003
220K/J3
IC7001
TL5001CPS-R
IN
FB
VCC
OUT
SCP
DTC
RT
GND
C7031
*PAT/UV
R7049
*PAT/J3
R7006
39K/J3
C7007
0.1/ZFV
R7004
1500/J3
D7001
MA3180-TW
Q7001
2SD1819AQRTW
R7007
100/J3
R7005
1500/J3
Q7002
2SB1218AQRTW
IC7003
AN77L09M-E1
IN
GND
OUT
C7035
16V33(OS)
Q7003
2SJ278MY-TR
S
D
G
R7008
1M/J3
C7004
*PAT/UV
R7009
*PAT/J3
D7002
EC10QS04-TEL
C7005
12R5V4R7(SP)
L7001
150U
C7033
16V56(KF)
R7011
2200/RE
R7010
18K/RE
C7006
*PAT/UV
VR7001
500/VR5
+B
TP7001
EYF6CU
L7002
6R8U/LC
R7015
8200/J3
R7013
8200/J3
C7009
1/ZFN
R7014
470K/J3
D7003
MA141K-TW
C7010
16V1/ST
R7017
33K/J3
C7011
0.022/UBV
R7018
10/J3
R7020
120/J3
C7029
16V10(T)
R7019
18K/J3
C7013
0.22/UBV
VR7002
5K/VR5
C7014
16V10(T)
R7021
12K/J3
R7022
12K/RE
H.HOLD
C7012
0.1/ZFV
R7016
1000/J3
IC7002
HA11423MPEL
R7024
8200/J3
C7019
0.1/ZFV
R7023
68K/J3
C7015
6800P/UBV
C7016
2200P
C7037
2200P
C7044
330P
C7017
0.047/UBV
VR7003
500/VR5
V.LIN
R7029
39K/J3
C7020
16V1/ST
C7022
4700P/UBV
VR7006
5K/VR5
R7033
6800/RE
V.HOLD
C7021
16V3R3/ST
R7030
220/J3
VR7004
200/VR5
V.SIZE
R7043
Q7010
2SD1819AQRTW
C7039
220P/UV
R7052
2200/J3
R7053
5100/J3
R7051
1000/J3
C7040
0.1/ZFV
R7025
33K/J3
R7026
2200/J3
C7018
1/ZFN
R7032
10K/RE
Q7005
2SD1819AQRTW
R7028
6800/J3
R7035
3300/J3
R7034
4700/J3
D7004
MA143-TW
R7027
5600/J3
R7036
4R7/J3
R7037
5600/J3
C7023
180P/UV
R7038
33K/J3
Q700
2SD181


4
5
6
7
8
9
10
11
Q7003
2SJ278MY-TR
S
D
G
L7001
150U
TP7001
EYF6CU
L7002
6R8U/LC
Q7010
2SD1819AQRTW
H.SIZE
VR7005
50/VR3
L7004
6R8U/LC
C7041
160V0.022(M)
P7003
VEP270888
1 NC
2 DEF +B
3 FB +B
4 GND
5 VD
6 HD
7 AFC
8 F_TALLY
R7004
1500/J3
D7001
MA3180-TW
Q7001
2SD1819AQRTW
R7008
1M/J3
R7010
18K/RE
C7006
*PAT/UV
R7051
1000/J3
C7040
0.1/ZFV
C7039
220P/UV
R7052
2200/J3
R7053
5100/J3
R7007
100/J3
R7015
8200/J3
R7013
8200/J3
P7016
VJP2277
1 F_TALLY
2 ZEBRA
3 CHARACTER
4 +B
5 GND
6 VIDEO
7 SYNC_SEPA
8 V_BLNK
R7005
1500/J3
Q7002
2SB1218AQRTW
D7002
EC10QS04-TEL
R7011
2200/RE
R7018
10/J3
R7020
120/J3
H.HOLD
C7013
0.22/UBV
VR7002
5K/VR5
C7014
16V10(T)
R7025
33K/J3
R7032
10K/RE
Q7005
2SD1819AQRTW
R7028
6800/J3
R7035
3300/J3
C7027
16V10(T)
R7050
2200/J3
C7004
*PAT/UV
R7009
*PAT/J3
C7005
12R5V4R7(SP)
C7033
16V56(KF)
VR7001
500/VR5
C7029
16V10(T)
R7019
18K/J3
R7021
12K/J3
R7022
12K/RE
R7026
2200/J3
C7018
1/ZFN
R7034
4700/J3
Q7006
2SC3624-T2
D7004
MA143-TW
R7036
4R7/J3
C7026
16V10(T)
TP7002
EYF6CU
P7014
VJP1595T
1 DY V (+)
2 DY V (-)
OUT
S-R
GND
+B
C7012
0.1/ZFV
R7016
1000/J3
R7027
5600/J3
C7028
2700P/UBV
R7041
560/J3
IC7002
HA11423MPEL
R7037
5600/J3
C7023
180P/UV
Q7008
2SA1411-T2
R7024
8200/J3
C7019
0.1/ZFV
D7003
MA141K-TW
R7038
33K/J3
Q7007
2SD1819AQRTW
R7040
47K/J3
C7025
6R3V120(KF)
C7036
6R3V120(KF)
IC7003
AN77L09M-E1
IN
OUT
GND
R7023
68K/J3
R7006
39K/J3
C7007
0.1/ZFV
C7035
16V33(DS)
C7009
1/ZFN
R7014
470K/J3
C7010
16V1/ST
R7017
33K/J3
C7011
0.022/UBV
C7015
6800P/UBV
C7016
2200P
C7037
2200P
C7044
330P
C7017
0.047/UBV
VR7003
500/VR5
R7029
39K/J3
C7020
16V1/ST
C7022
4700P/UBV
R7033
6800/RE
VR7006
5K/VR5
C7021
16V3R3/ST
VR7004
200/VR5
R7030
220/J3
R7043
1000/J3
C7024
0.1/ZFV
R7039
100K/J3
R7042
12/J3
TPG
EYF6CU
V.LIN
V.HOLD
V.SIZE

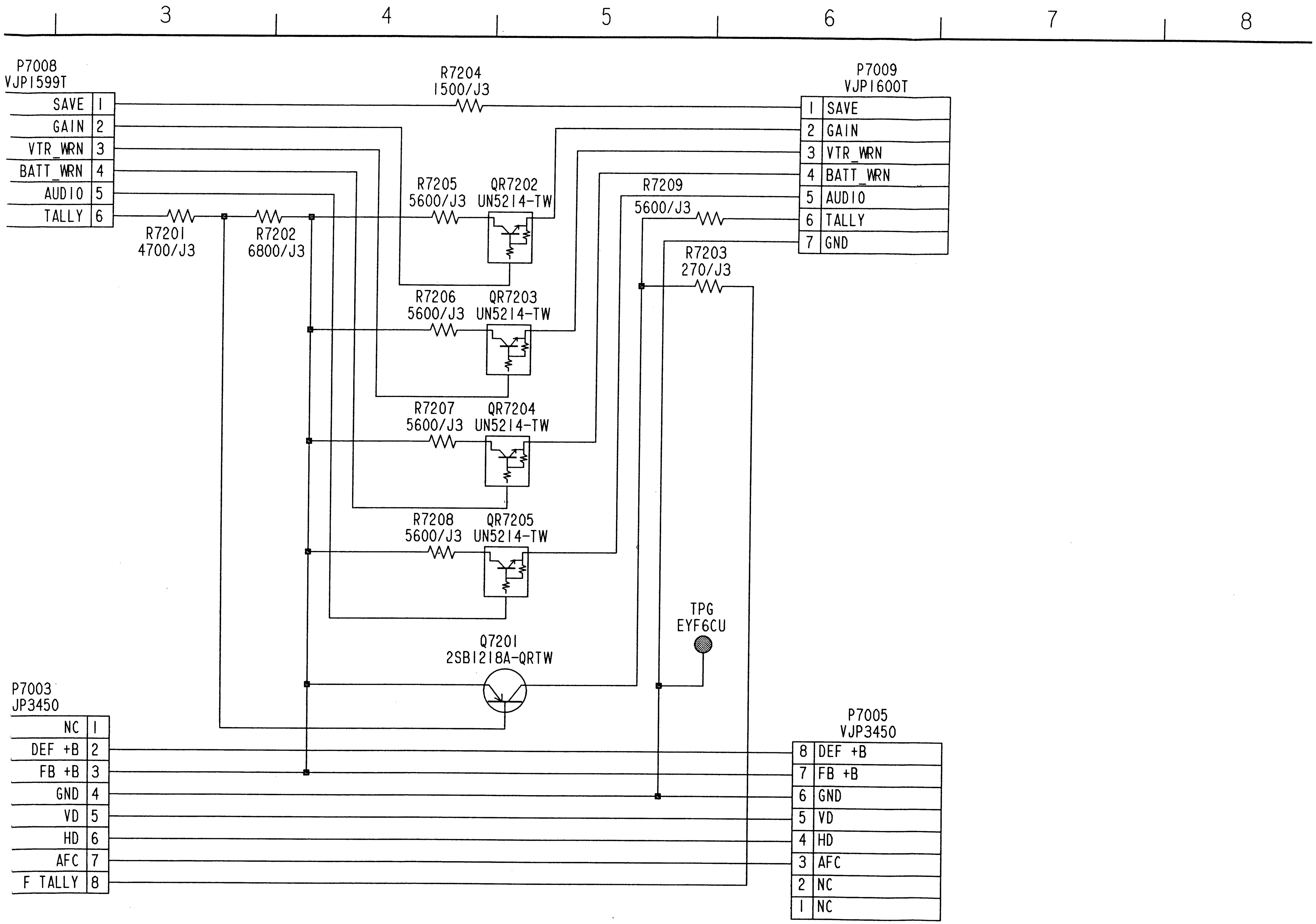
*=REFER TO THE COMPARISON CHART

Ref No.7000 Series.

CN SCHEMATIC DIAGRAM 1／1（E3:Page CBA-2）

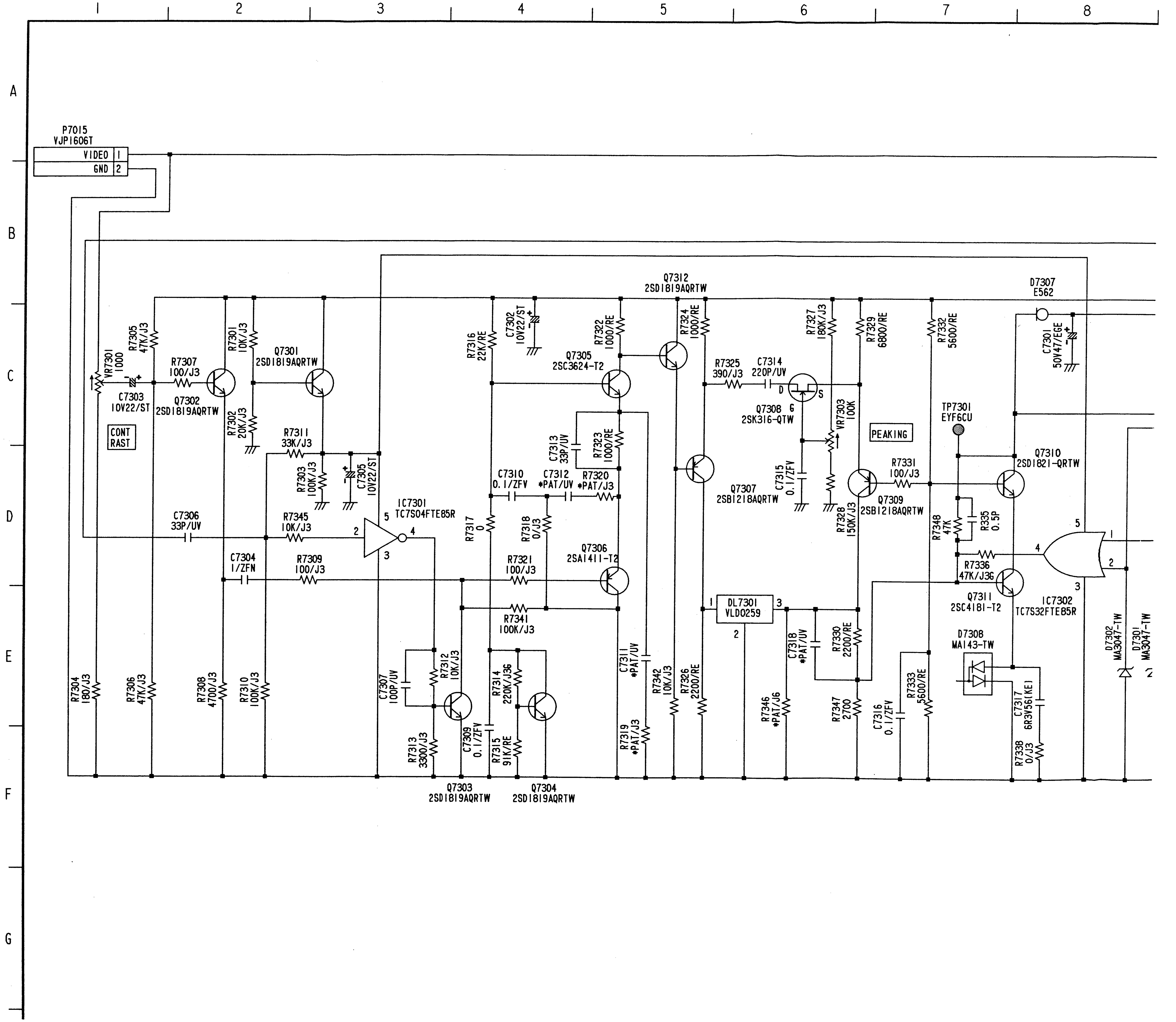

1
2
3
4
5
6
A
B
C
D
E
P7008
VJP1599T
SAVE 1
GAIN 2
VTR_WRN 3
BATT_WRN 4
AUDIO 5
TALLY 6
R7201
4700/J3
R7202
6800/J3
R7204
1500/J3
R7205
5600/J3
QR7202
UN5214-TW
R7206
5600/J3
QR7203
UN5214-TW
R7207
5600/J3
QR7204
UN5214-TW
R7208
5600/J3
QR7205
UN5214-TW
R7209
5600/J3
R7203
270/J3
P7009
VJP1600T
1 SAVE
2 GAIN
3 VTR_WRN
4 BATT_WRN
5 AUDIO
6 TALLY
7 GND
TPG
EYF6CU
Q7201
2SB1218A-QRTW
P7003
VJP3450
NC 1
DEF +B 2
FB +B 3
GND 4
VD 5
HD 6
AFC 7
F TALLY 8
P7005
VJP3450
8 DEF +B
7 FB +B
6 GND
5 VD
4 HD
3 AFC
2 NC
1 NC

3:Page CBA-2)

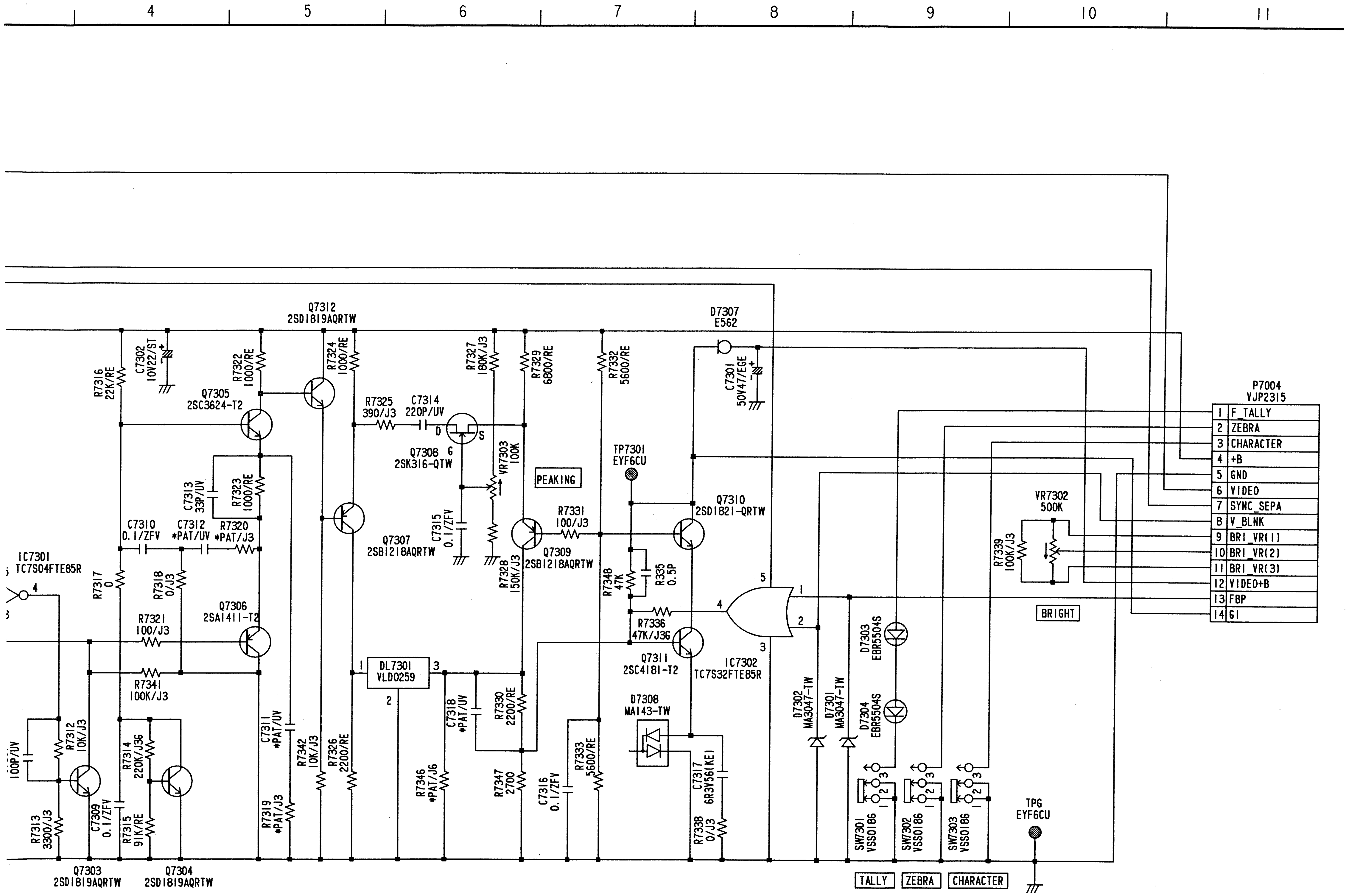

3
4
5
6
7
8
P7008
VJP1599T
SAVE 1
GAIN 2
VTR_WRN 3
BATT_WRN 4
AUDIO 5
TALLY 6
R7201
4700/J3
R7202
6800/J3
R7204
1500/J3
R7205
5600/J3
QR7202
UN5214-TW
R7206
5600/J3
QR7203
UN5214-TW
R7207
5600/J3
QR7204
UN5214-TW
R7208
5600/J3
QR7205
UN5214-TW
R7209
5600/J3
R7203
270/J3
P7009
VJP1600T
1 SAVE
2 GAIN
3 VTR_WRN
4 BATT_WRN
5 AUDIO
6 TALLY
7 GND
TPG
EYF6CU
Q7201
2SB1218A-QRTW
P7003
JP3450
NC 1
DEF +B 2
FB +B 3
GND 4
VD 5
HD 6
AFC 7
F TALLY 8
P7005
VJP3450
8 DEF +B
7 FB +B
6 GND
5 VD
4 HD
3 AFC
2 NC
1 NC

Ref No.7200 Series.

FRONT BOARD SCHEMATIC DIAGRAM (E4:Page CBA-4)


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
P7015
VJP1606T
VIDEO 1
GND 2
VR7301
1000
C7303
10V22/ST
R7305
47K/J3
R7307
100/J3
Q7302
2SD1819AQRTW
CONT
RAST
R7301
10K/J3
Q7301
2SD1819AQRTW
R7302
20K/J3
R7311
33K/J3
R7303
100K/J3
C7305
10V22/ST
C7306
33P/UV
R7345
10K/J3
C7304
1/ZFN
R7309
100/J3
IC7301
TC7S04FTE85R
5
2
4
3
R7304
180/J3
R7306
47K/J3
R7308
4700/J3
R7310
100K/J3
C7307
100P/UV
R7312
10K/J3
R7313
3300/J3
Q7303
2SD1819AQRTW
C7309
0.1/ZFV
R7314
220K/J36
R7315
91K/RE
Q7304
2SD1819AQRTW
R7316
22K/RE
C7302
10V22/ST
R7317
0
C7310
0.1/ZFV
R7318
0/J3
R7321
100/J3
R7341
100K/J3
Q7305
2SC3624-T2
R7322
1000/RE
C7313
33P/UV
R7323
1000/RE
C7312
*PAT/UV
R7320
*PAT/J3
Q7306
2SA1411-T2
C7311
*PAT/UV
R7319
*PAT/J3
R7342
10K/J3
Q7312
2SD1819AQRTW
R7324
1000/RE
R7326
2200/RE
Q7307
2SB1218AQRTW
R7325
390/J3
C7314
220P/UV
D
S
G
Q7308
2SK316-QTW
C7315
0.1/ZFV
R7327
180K/J3
VR7303
100K
R7328
150K/J3
DL7301
VLD0259
1
3
2
C7318
*PAT/UV
R7346
*PAT/J6
R7330
2200/RE
R7347
2700
R7329
6800/RE
PEAKING
Q7309
2SB1218AQRTW
R7331
100/J3
R7332
5600/RE
C7316
0.1/ZFV
R7333
5600/RE
TP7301
EYF6CU
R7348
47K
R335
0.5P
R7336
47K/J3G
Q7310
2SD1821-QRTW
Q7311
2SC4181-T2
D7308
MA143-TW
C7317
6R3V56(KE)
R7338
0/J3
D7307
E562
C7301
50V47/EGE
IC7302
TC7S32FTEB5R
5
4
1
2
3
D7302
MA3047-TW
D7301
MA3047-TW

AM (E4:Page CBA-4)

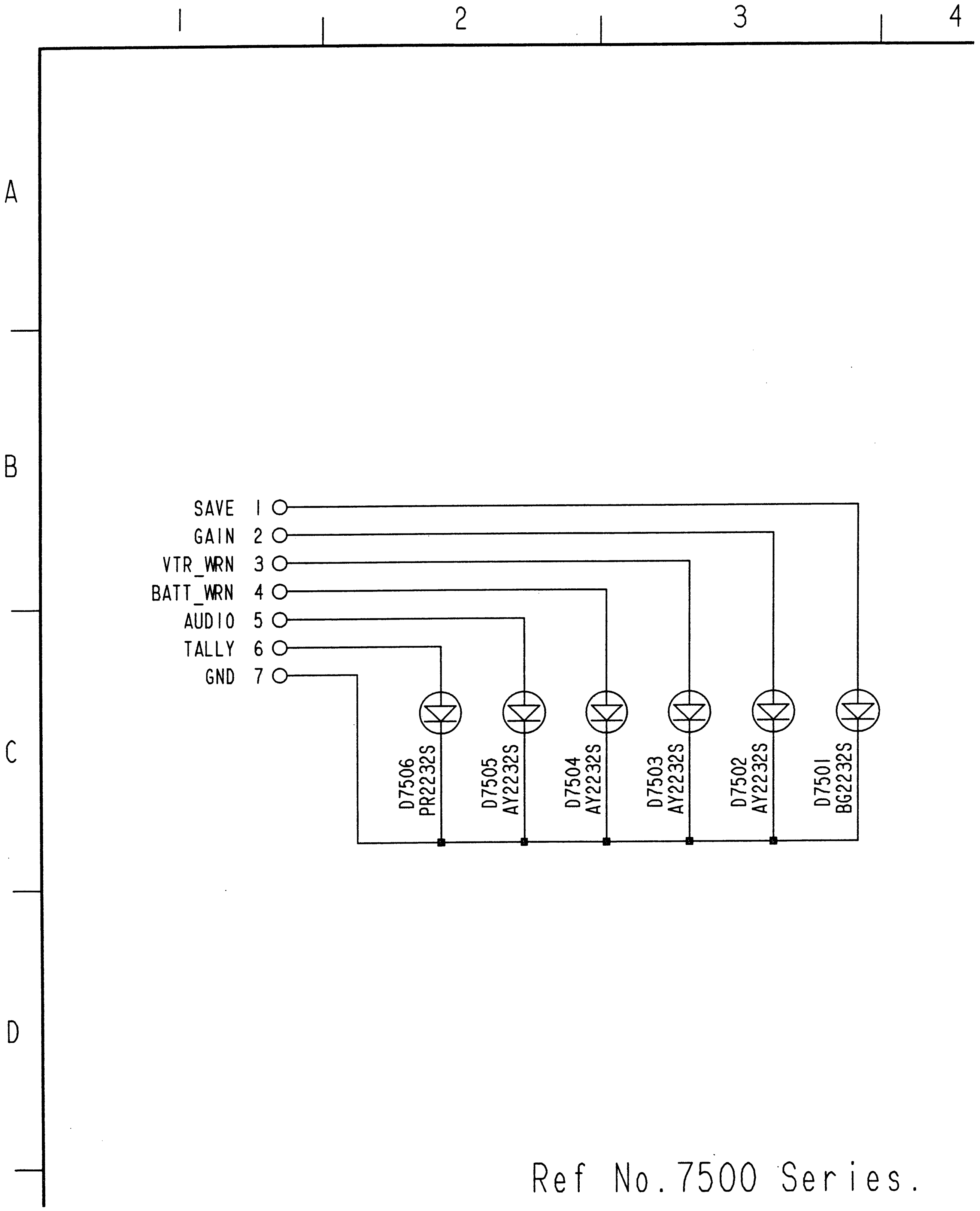


4
5
6
7
8
9
10
11
Q7312
2SD1819AQRTW
D7307
E562
R7316
22K/RE
C7302
10V22/ST
R7322
1000/RE
R7324
1000/RE
R7327
180K/J3
R7329
6800/RE
R7332
5600/RE
C7301
50V47/EGE
P7004
VJP2315
Q7305
2SC3624-T2
R7325
390/J3
C7314
220P/UV
D
S
G
Q7308
2SK316-QTW
VR7303
100K
TP7301
EYF6CU
PEAKING
C7313
33P/UV
R7323
1000/RE
C7310
0.1/ZFV
C7312
*PAT/UV
R7320
*PAT/J3
C7315
0.1/ZFV
Q7307
2SB1218AQRTW
R7331
100/J3
Q7309
2SB1218AQRTW
Q7310
2SD1821-QRTW
R7328
150K/J3
R7348
47K
R335
0.5P
VR7302
500K
R7339
100K/J3
IC7301
TC7S04FTE85R
4
3
R7317
0
R7318
0/J3
R7321
100/J3
Q7306
2SA1411-T2
R7336
47K/J36
Q7311
2SC4181-T2
IC7302
TC7S32FTE85R
5
4
1
2
3
BRIGHT
R7341
100K/J3
DL7301
VLD0259
1
2
3
D7308
MA143-TW
D7303
EBR5504S
D7304
EBR5504S
D7302
MA3047-TW
D7301
MA3047-TW
100P/UV
R7312
10K/J3
R7314
220K/J36
C7311
*PAT/UV
R7342
10K/J3
R7326
2200/RE
C7318
*PAT/UV
R7330
2200/RE
R7346
*PAT/J6
R7347
2700
C7316
0.1/ZFV
R7333
5600/RE
C7317
6R3V56(KE)
R7338
0/J3
R7313
3300/J3
C7309
0.1/ZFV
R7315
91K/RE
R7319
*PAT/J3
SW7301
VSS0186
SW7302
VSS0186
SW7303
VSS0186
1
2
3
TPG
EYF6CU
Q7303
2SD1819AQRTW
Q7304
2SD1819AQRTW
TALLY
ZEBRA
CHARACTER
1 F_TALLY
2 ZEBRA
3 CHARACTER
4 +B
5 GND
6 VIDEO
7 SYNC_SEPA
8 V_BLNK
9 BRI_VR(1)
10 BRI_VR(2)
11 BRI_VR(3)
12 VIDEO+B
13 FBP
14 G1

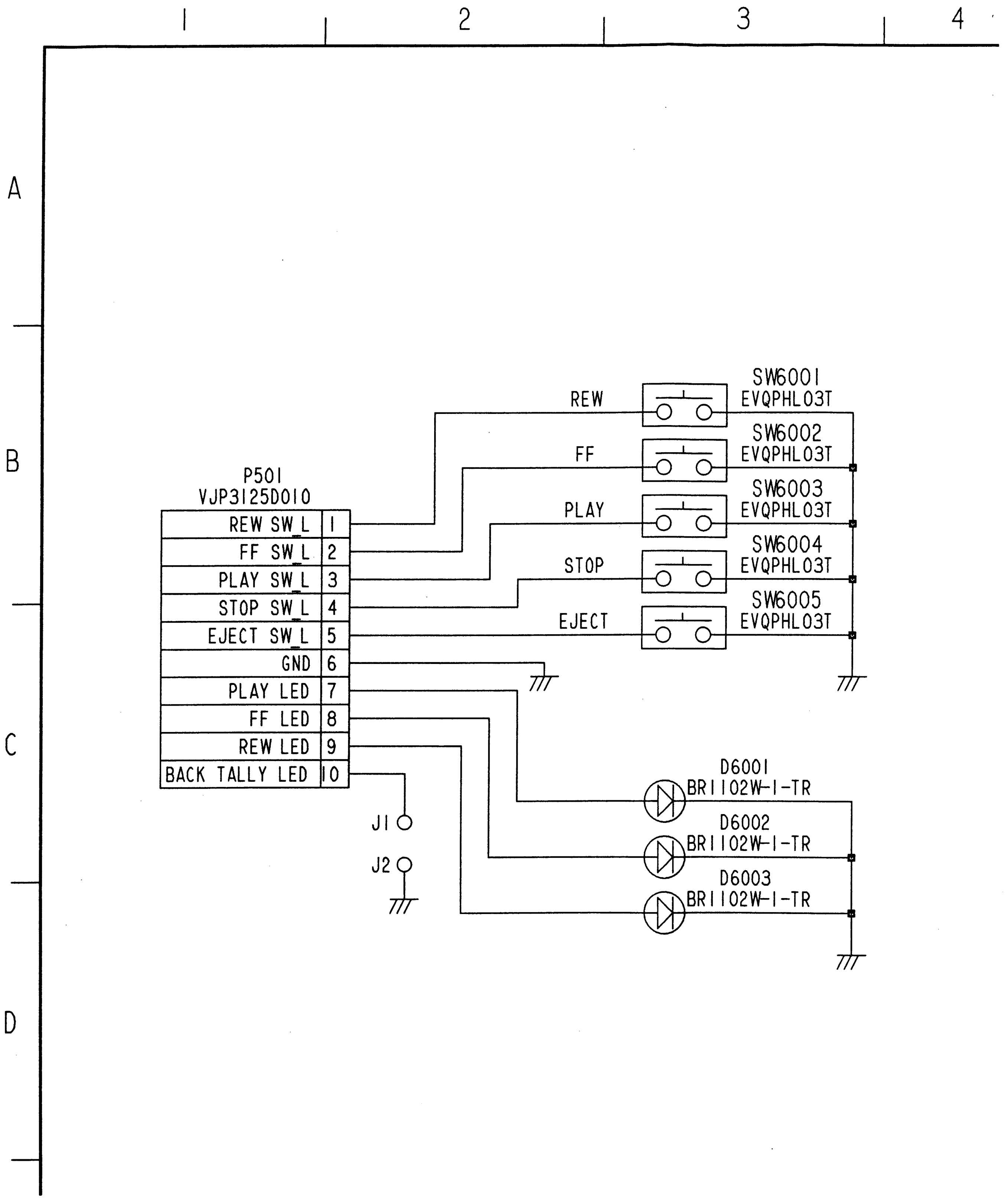
*=REFER TO THE COMPARISON CHART

Ref No.7300 Series.

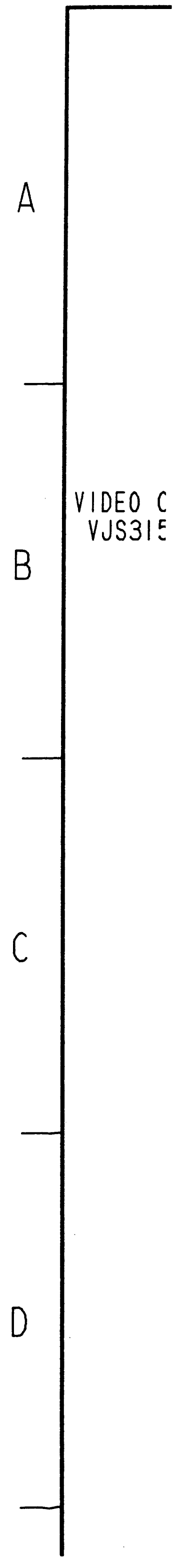
CRT MASK BOARD SCHEMATIC DIAGRAM 1／1 (E5:Page CBA-2)


1
2
3
4
A
B
C
D
SAVE 1
GAIN 2
VTR_WRN 3
BATT_WRN 4
AUDIO 5
TALLY 6
GND 7
D7506 PR2232S
D7505 AY2232S
D7504 AY2232S
D7503 AY2232S
D7502 AY2232S
D7501 BG2232S
Ref No.7500 Series.

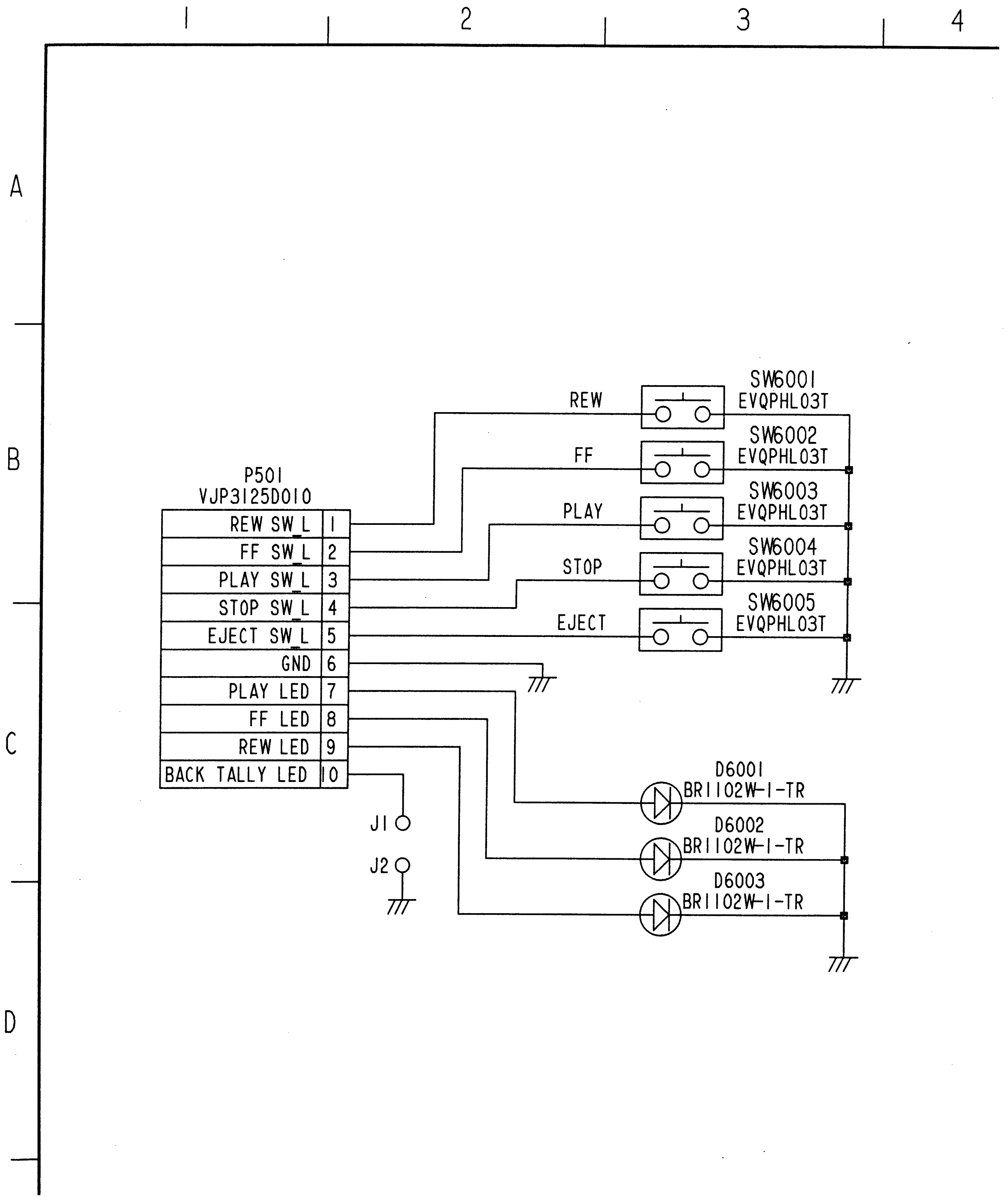
OPERATE SCHEMATIC DIAGRAM 1／1 (E24:Page CBA-3)


1
2
3
4
A
B
C
D
P501
VJP3125D010
REW SW L 1
FF SW L 2
PLAY SW L 3
STOP SW L 4
EJECT SW L 5
GND 6
PLAY LED 7
FF LED 8
REW LED 9
BACK TALLY LED 10
REW
FF
PLAY
STOP
EJECT
SW6001 EVQPHL03T
SW6002 EVQPHL03T
SW6003 EVQPHL03T
SW6004 EVQPHL03T
SW6005 EVQPHL03T
D6001 BR1102W-1-TR
D6002 BR1102W-1-TR
D6003 BR1102W-1-TR
J1
J2

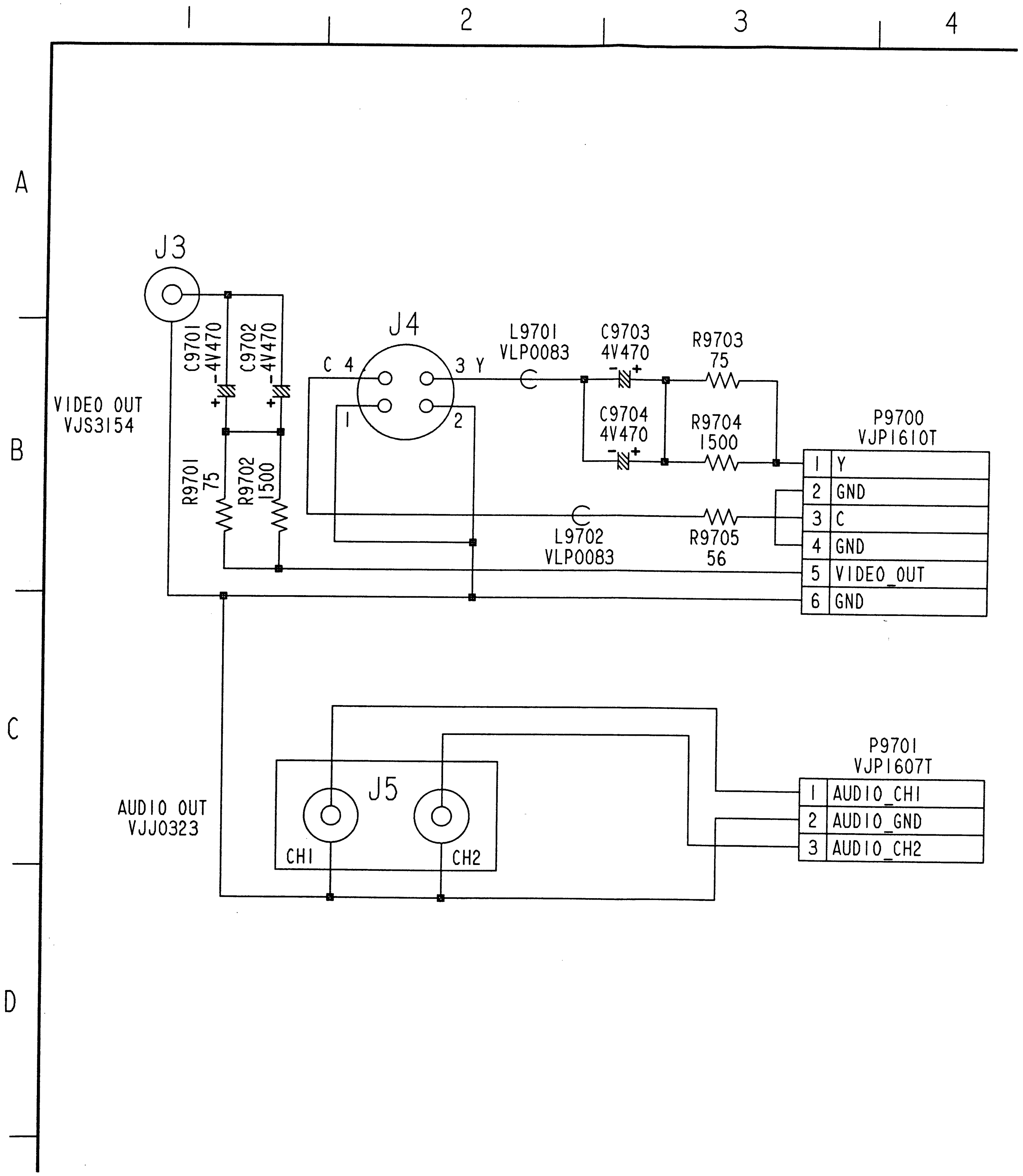
AV O


A
B
C
D
VIDEO C
VJS31

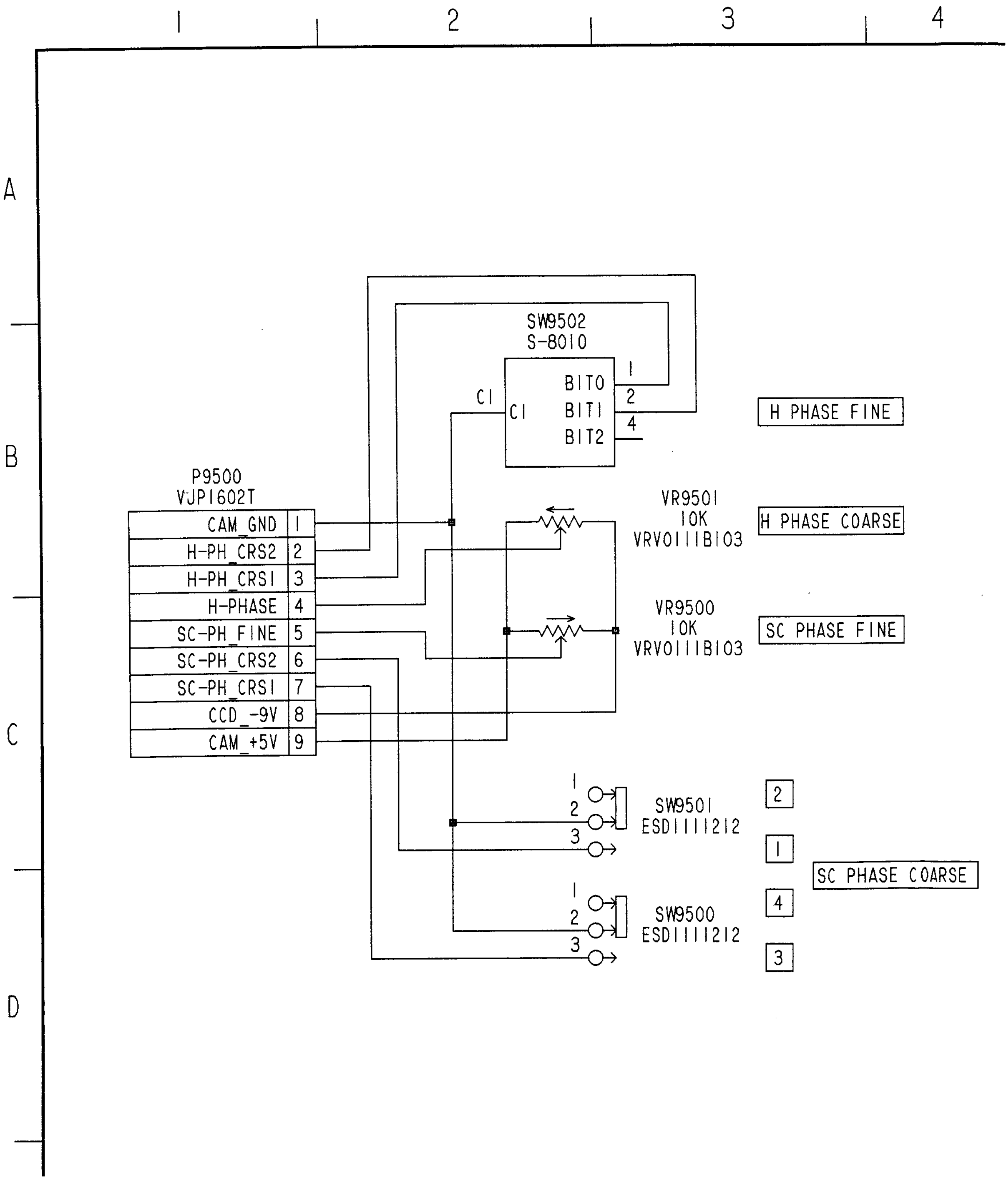
OPERATE SCHEMATIC DIAGRAM 1／1 (E24:Page CBA-3)


1
2
3
4
A
B
C
D
P501
VJP3125D010
REW SW_L 1
FF SW_L 2
PLAY SW_L 3
STOP SW_L 4
EJECT SW_L 5
GND 6
PLAY LED 7
FF LED 8
REW LED 9
BACK TALLY LED 10
J1
J2
REW
FF
PLAY
STOP
EJECT
SW6001
EVQPHL03T
SW6002
EVQPHL03T
SW6003
EVQPHL03T
SW6004
EVQPHL03T
SW6005
EVQPHL03T
D6001
BR1102W-1-TR
D6002
BR1102W-1-TR
D6003
BR1102W-1-TR

AV OUT SCHEMATIC DIAGRAM 1／1 (E8:Page CBA-5)

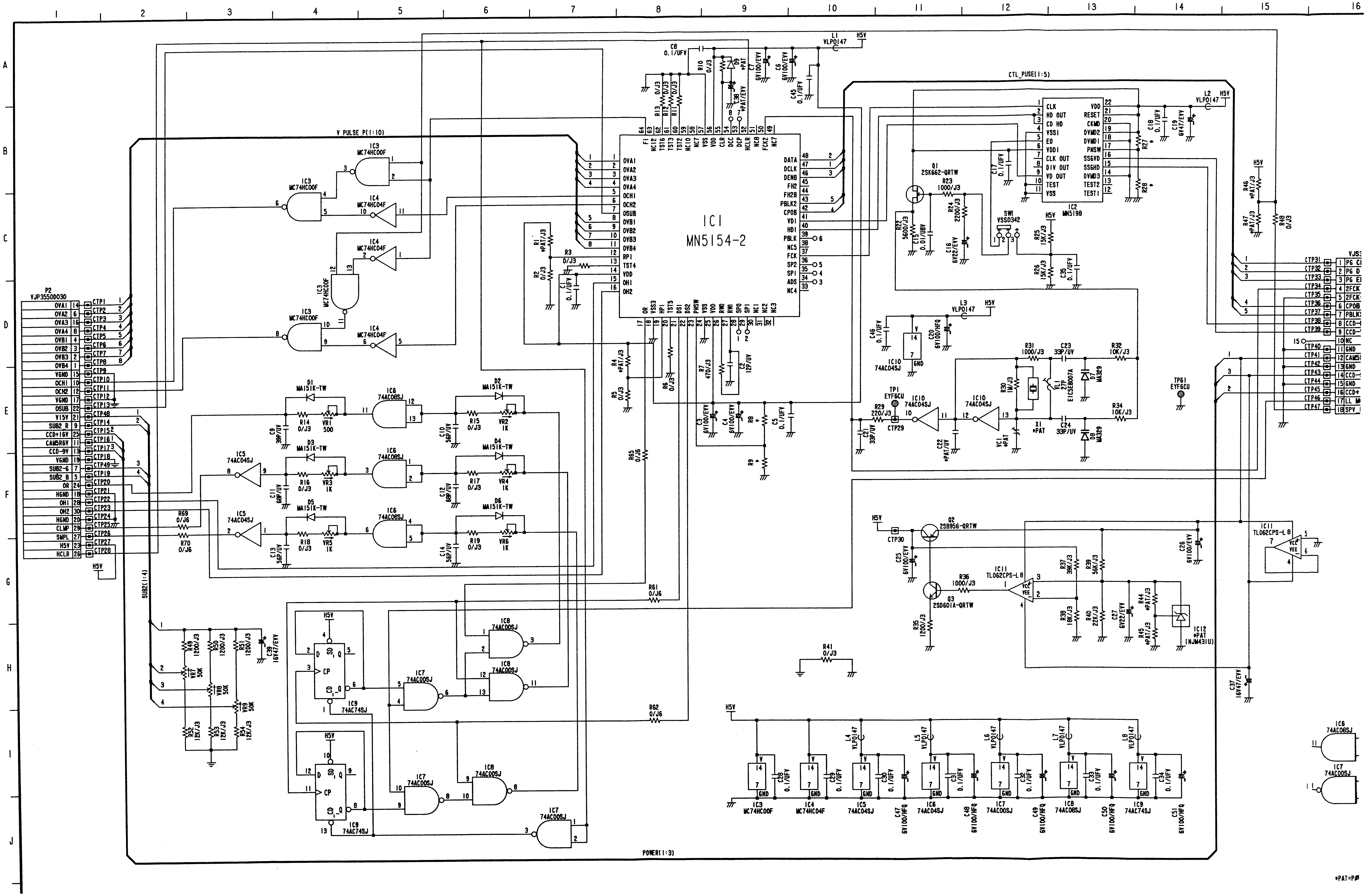

1
2
3
4
A
B
C
D
J3
VIDEO OUT
VJS3154
C9701
4V470
C9702
4V470
R9701
75
R9702
1500
J4
C 4
3 Y
1
2
L9701
VLP0083
C9703
4V470
C9704
4V470
R9703
75
R9704
1500
L9702
VLP0083
R9705
56
P9700
VJP1610T
1 Y
2 GND
3 C
4 GND
5 VIDEO_OUT
6 GND
AUDIO OUT
VJJ0323
J5
CH1
CH2
P9701
VJP1607T
1 AUDIO_CH1
2 AUDIO_GND
3 AUDIO_CH2

GEN LOCK SCHEMATIC DIAGRAM 1／1（E31:Page CBA-5）

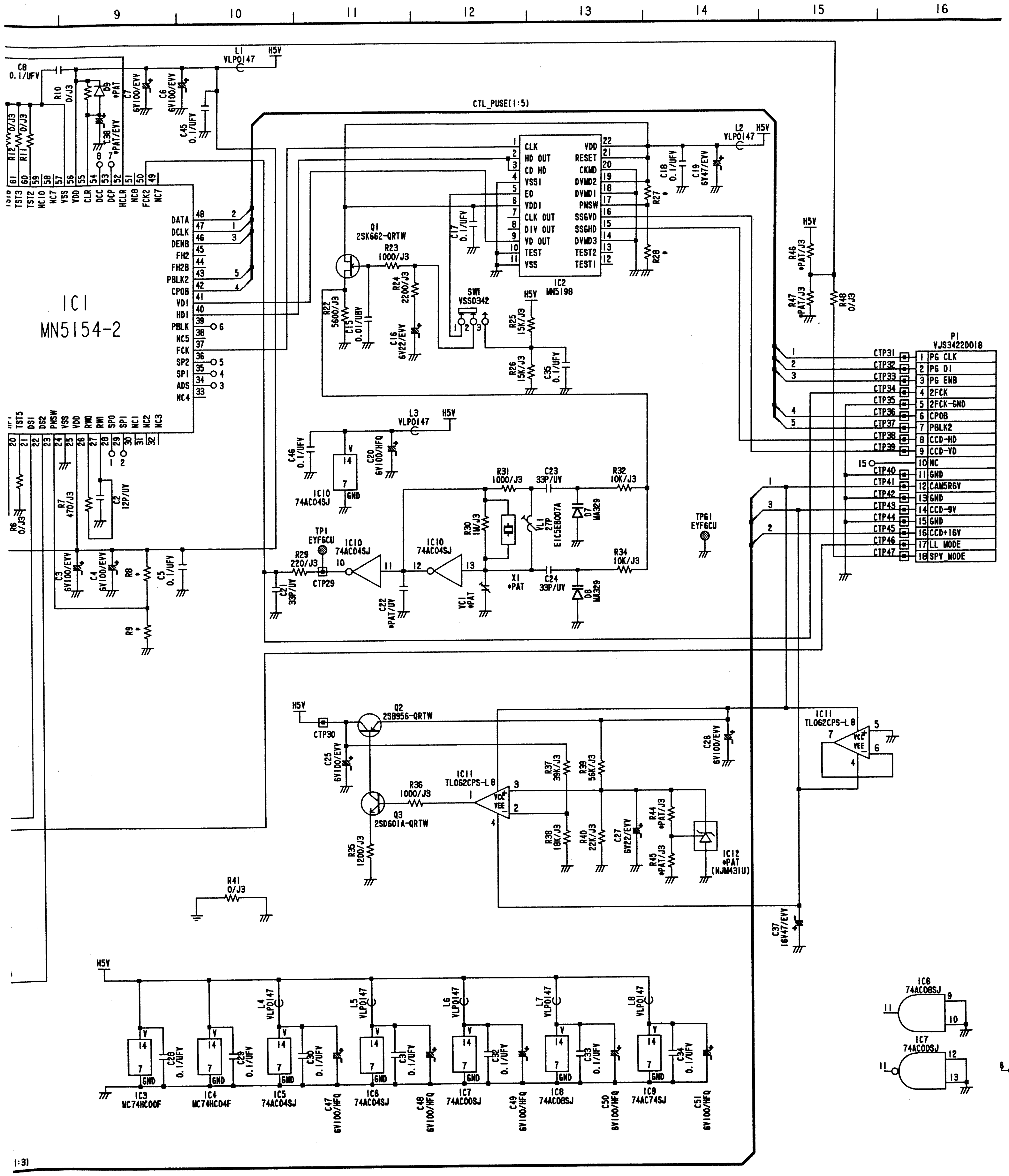

1
2
3
4
A
B
C
D
SW9502
S-8010
C1
C1
BIT0
BIT1
BIT2
1
2
4
H PHASE FINE
P9500
VJP1602T
CAM_GND 1
H-PH_CRS2 2
H-PH_CRS1 3
H-PHASE 4
SC-PH_FINE 5
SC-PH_CRS2 6
SC-PH_CRS1 7
CCD_-9V 8
CAM_+5V 9
VR9501
10K
VRV0111B103
H PHASE COARSE
VR9500
10K
VRV0111B103
SC PHASE FINE
1
2
3
SW9501
ESD1111212
2
1
SC PHASE COARSE
4
3
1
2
3
SW9500
ESD1111212

Memo

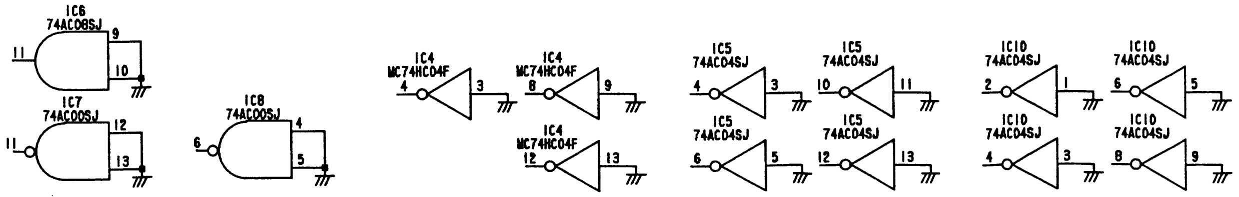
CCD PULSE SCHEMATIC DIAGRAM 1／1（E19:Page CBA-6）



IC1
MN5154-2
IC2
MN5198
IC3
MC74HC00F
IC4
MC74HC04F
IC5
74AC04SJ
IC6
74AC08SJ
IC7
74AC00SJ
IC8
74AC00SJ
IC9
74AC74SJ
IC10
74AC04SJ
IC11
TL062CPS-LB
IC12
*PAT
(NJM431U)
Q1
2SK662-QRTW
Q2
2SB956-QRTW
Q3
2SD601A-QRTW
P2
VJP3550D030
VJS3
SW1
VSS0342
X1
*PAT
VL1
27P
EFC5E007A
D1 MA151K-TW
D2 MA151K-TW
D3 MA151K-TW
D4 MA151K-TW
D5 MA151K-TW
D6 MA151K-TW
D7 MA329
D8 MA329
L1 VLP0147
L2 VLP0147
L3 VLP0147
L4 VLP0147
L5 VLP0147
L6 VLP0147
L7 VLP0147
L8 VLP0147
TP1
EYF6CU
TP61
EYF6CU
V PULSE P(1:10)
CTL PUSE(1:5)
SUB2(1:4)
POWER(1:3)
H5V
OVA1
OVA2
OVA3
OVA4
OVB1
OVB2
OVB3
OVB4
VGND
OCH1
OCH2
OSUB
V15V
SUB2_R
CCD+16V
CAM5R6V
CCD-9V
SUB2-6
SUB2_B
OR
HGND
OH1
OH2
CLMP
SMPL
HCLR
CLK
HD OUT
CD HD
VSS1
ED
VDD1
CLK OUT
DIV OUT
VD OUT
TEST
VSS
VDD
RESET
CKMD
DVMD2
DVMD1
PNSW
SSGVD
SSGHD
DVMD3
TEST2
TEST1
DATA
DCLK
DENB
FH2
FH2B
PBLK2
CPOB
VD1
HD1
PBLK
NC5
FCK
SP2
SP1
ADS
NC4
OR
VSS3
HP1
TST5
DS1
DS2
PNSW
VSS
VDD
RWO
RW1
SPO
SP1
NC1
NC2
NC3
F1
NC12
TST6
TST3
TST2
NC10
NC7
VSS
VDD
CLR
DCC
DCP
HCLR
NC8
FCK2
NC7
RP1
TST4
VDD
OH1
OH2
CTP1
CTP2
CTP3
CTP4
CTP5
CTP6
CTP7
CTP8
CTP9
CTP10
CTP11
CTP12
CTP13
CTP14
CTP15
CTP16
CTP17
CTP18
CTP19
CTP20
CTP21
CTP22
CTP23
CTP24
CTP25
CTP26
CTP27
CTP28
CTP29
CTP30
CTP31
CTP32
CTP33
CTP34
CTP35
CTP36
CTP37
CTP38
CTP39
CTP40
CTP41
CTP42
CTP43
CTP44
CTP45
CTP46
CTP47
CTP48
CTP49
R1 *PAT/J3
R2 0/J3
R3 0/J3
R4 *PAT/J3
R5 0/J3
R6 0/J3
R7 470/J3
R10 0/J3
R11 0/J3
R12 0/J3
R13 0/J3
R14 0/J3
R15 0/J3
R16 0/J3
R17 0/J3
R18 0/J3
R19 0/J3
R22 5600/J3
R23 1000/J3
R24 2200/J3
R25 15K/J3
R26 15K/J3
R29 220/J3
R30 1M/J3
R31 1000/J3
R32 10K/J3
R34 10K/J3
R35 1200/J3
R36 1000/J3
R37 39K/J3
R38 18K/J3
R39 56K/J3
R40 22K/J3
R41 0/J3
R44 *PAT/J3
R45 *PAT/J3
R46 *PAT/J3
R47 *PAT/J3
R48 0/J3
R49 1200/J3
R50 1200/J3
R51 1200/J3
R52 12K/J3
R53 12K/J3
R54 12K/J3
R61 0/J6
R62 0/J6
R65 0/J6
R69 0/J6
R70 0/J6
VR1 500
VR2 1K
VR3 1K
VR4 1K
VR5 1K
VR6 1K
VR7 50K
VR8 50K
VR9 50K
VC1 *PAT
C1 0.1/UFV
C2 12P/UV
C3 6V100/EVV
C4 6V100/EVV
C5 0.1/UFV
C6 6V100/EVV
C7 6V100/EVV
C8 0.1/UFV
C9 39P/UV
C10 56P/UV
C11 68P/UV
C12 68P/UV
C13 56P/UV
C14 56P/UV
C15 0.01/UBY
C16 6V22/EVV
C17 0.1/UFV
C18 0.1/UFV
C19 6V47/EVV
C20 6V100/HFQ
C21 33P/UV
C22 *PAT/UV
C23 33P/UV
C24 33P/UV
C25 6V100/EVV
C26 6V100/EVV
C27 6V22/EVV
C28 0.1/UFV
C29 0.1/UFV
C30 0.1/UFV
C31 0.1/UFV
C32 0.1/UFV
C33 0.1/UFV
C34 0.1/UFV
C35 0.1/UFV
C37 16V47/EVV
C38 *PAT/EVV
C39 16V47/EVV
C45 0.1/UFV
C46 0.1/UFV
C47 6V100/HFQ
C48 6V100/HFQ
C49 6V100/HFQ
C50 6V100/HFQ
C51 6V100/HFQ
D9 *PAT
GND
*PAT=P#


9
10
11
12
13
14
15
16
IC1
MN5154-2
IC2
MN5198
Q1
2SK662-QRTW
Q2
2SB956-QRTW
Q3
2SD601A-QRTW
IC10
74AC04SJ
IC11
TL062CPS-L8
IC12
*PAT
(NJM431U)
SW1
VSS0342
P1
VJS3422D018
CTL_PUSE(1:5)
TP1
EYF6CU
TP61
EYF6CU
X1
*PAT
VC1
*PAT
L1
VLP0147
L2
VLP0147
L3
VLP0147
H5V
IC3
MC74HC00F
IC4
MC74HC04F
IC5
74AC04SJ
IC6
74AC04SJ
IC7
74AC00SJ
IC8
74AC08SJ
IC9
74AC74SJ
R41
0/J3
CTP29
CTP30
PG CLK
PG DI
PG ENB
2FCK
2FCK-GND
CPOB
PBLK2
CCD-HD
CCD-VD
NC
GND
CAMSR6V
GND
CCD-9V
GND
CCD+16V
LL MODE
SPY MODE
(1:3)

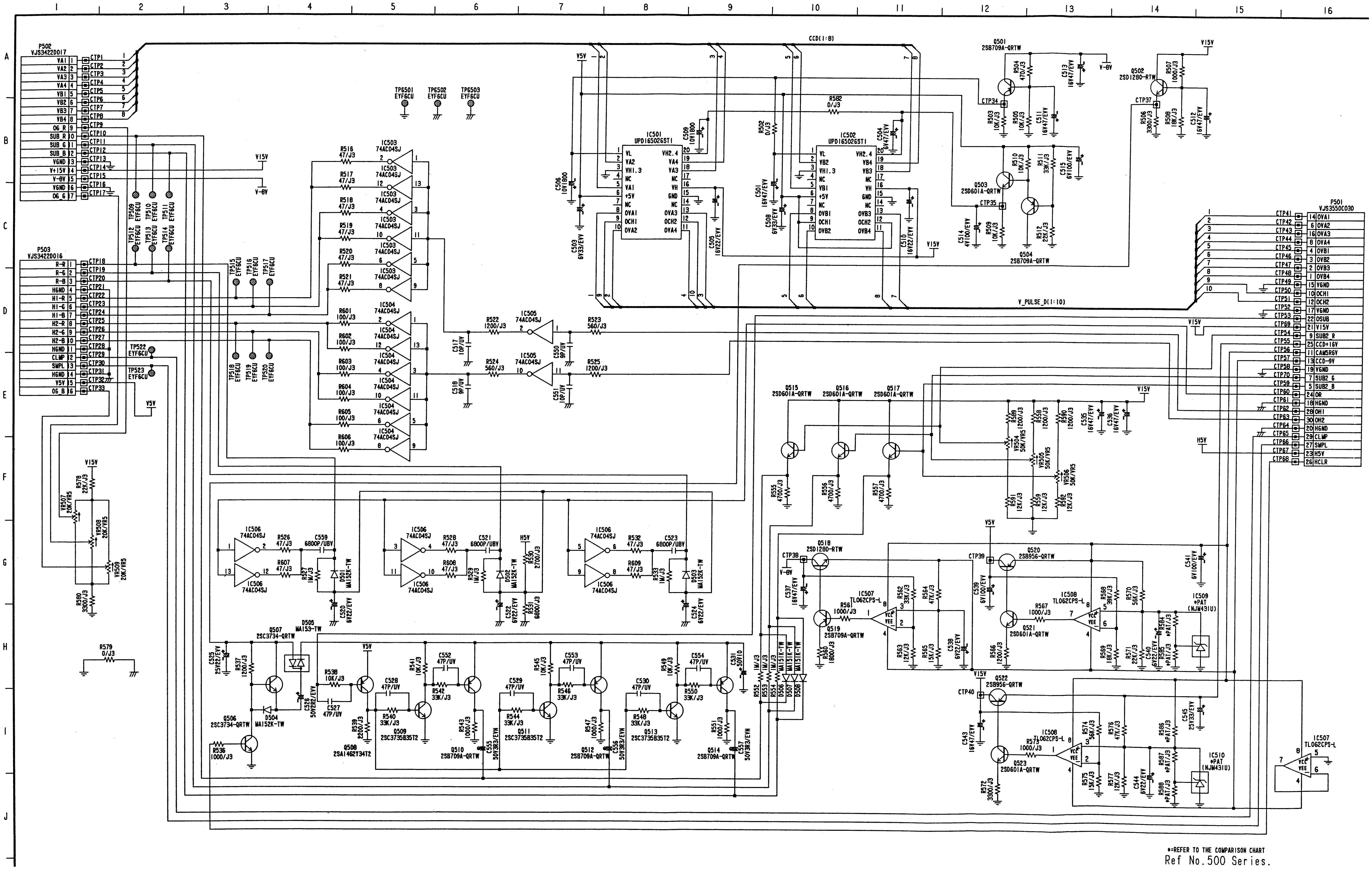
*PAT=PATTERN ONLY


IC6
74AC08SJ
IC7
74AC00SJ
IC8
74AC00SJ
IC4
MC74HC04F
IC5
74AC04SJ
IC10
74AC04SJ

CCD PULSE COMPARISON CHART
(E19:Page CBA-6)

REF	NTSC	PAL
C22	*PAT/UV	*PAT/UV
C36	*PAT/UV	*PAT/UV
C38	*PAT/EVV	*PAT/EVV
D9	*PAT	*PAT
IC12	*PAT	*PAT
R1	*PAT/J3	*PAT/J3
R27	0/J3	*PAT/J3
R28	*PAT/J3	0/J3
R4	*PAT/J3	*PAT/J3
R42	*PAT/J3	*PAT/J3
R44	*PAT/J3	*PAT/J3
R45	*PAT/J3	*PAT/J3
R46	*PAT/J3	*PAT/J3
R47	*PAT/J3	*PAT/J3
R8	*PAT/J3	0/J3
R9	0/J3	*PAT/J3
VC1	*PAT	*PAT
X1	*PAT	*PAT

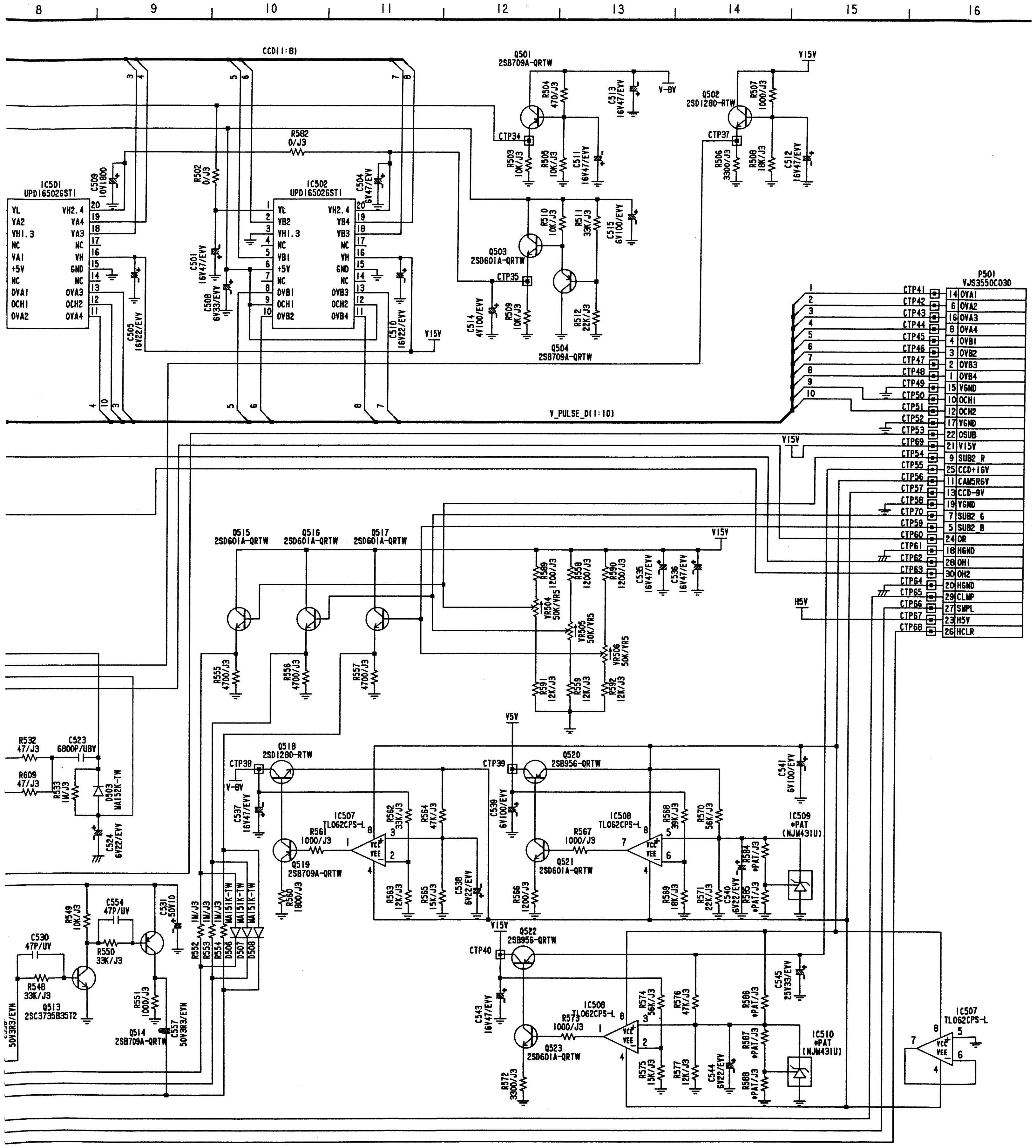
CCD DRIVE SCHEMATIC DIAGRAM 1／1（E20:Page CBA-7）

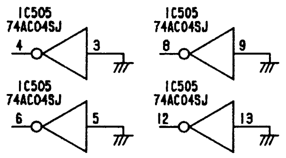


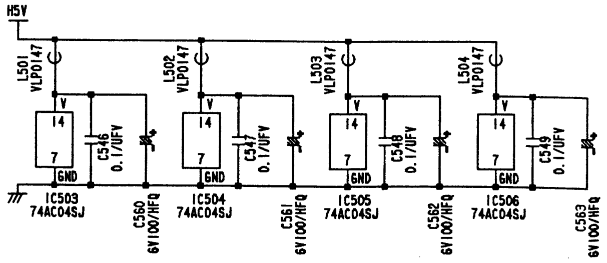
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
J
P502
VJS3422D017
VA1
VA2
VA3
VA4
VB1
VB2
VB3
VB4
O6_R
SUB_R
SUB_G
SUB_B
VGND
V+15V
V-8V
VGND
O6_G
P503
VJS3422D016
R-R
R-G
R-B
HGND
H1-R
H1-G
H1-B
H2-R
H2-G
H2-B
HGND
CLMP
SMPL
HGND
V5V
O6_B
CCD(1:8)
V_PULSE_D(1:10)
IC501
UPD16502GST1
IC502
UPD16502GST1
IC503
74AC04SJ
IC504
74AC04SJ
IC505
74AC04SJ
IC506
74AC04SJ
IC507
TL062CPS-L
IC508
TL062CPS-L
IC509
*PAT
(NJM431U)
IC510
*PAT
(NJM431U)
Q501
2SB709A-QRTW
Q502
2SD1280-RTW
Q503
2SD601A-QRTW
Q504
2SB709A-QRTW
Q506
2SC3734-QRTW
Q507
2SC3734-QRTW
Q508
2SA1462Y34T2
Q509
2SC3735B35T2
Q510
2SB709A-QRTW
Q511
2SC3735B35T2
Q512
2SB709A-QRTW
Q513
2SC3735B35T2
Q514
2SB709A-QRTW
Q515
2SD601A-QRTW
Q516
2SD601A-QRTW
Q517
2SD601A-QRTW
Q518
2SD1280-RTW
Q519
2SB709A-QRTW
Q520
2SB956-QRTW
Q521
2SD601A-QRTW
Q522
2SB956-QRTW
Q523
2SD601A-QRTW
D501
MA152K-TW
D502
MA152K-TW
D503
MA152K-TW
D504
MA152K-TW
D505
MA153-TW
D506
D507
D508
MA151K-TW
TP6501
TP6502
TP6503
EYF6CU
TP509
TP510
TP511
TP512
TP513
TP514
TP515
TP516
TP517
TP518
TP519
TP520
TP522
TP523
VR504
VR505
VR506
VR507
VR508
VR509
P501
VJS3550C030
OVA1
OVA2
OVA3
OVA4
OVB1
OVB2
OVB3
OVB4
VGND
OCH1
OCH2
VGND
OSUB
V15V
SUB2_R
CCD+16V
CAM5R6V
CCD-9V
VGND
SUB2_G
SUB2_B
OR
HGND
OH1
OH2
HGND
CLMP
SMPL
H5V
HCLR
V15V
V-8V
V5V
H5V

*=REFER TO THE COMPARISON CHART

Ref No.500 Series.


8
9
10
11
12
13
14
15
16
CCD(1:8)
IC501
UPD16502GSTI
IC502
UPD16502GSTI
R582
0/J3
Q501
2SB709A-QRTW
Q502
2SD1280-RTW
Q503
2SD601A-QRTW
Q504
2SB709A-QRTW
CTP34
CTP35
CTP37
V15V
V-8V
P501
VJS3550C030
V_PULSE_D(1:10)
CTP41
CTP42
CTP43
CTP44
CTP45
CTP46
CTP47
CTP48
CTP49
CTP50
CTP51
CTP52
CTP53
CTP69
CTP54
CTP55
CTP56
CTP57
CTP58
CTP70
CTP59
CTP60
CTP61
CTP62
CTP63
CTP64
CTP65
CTP66
CTP67
CTP68
14 OVA1
6 OVA2
16 OVA3
8 OVA4
4 OVB1
3 OVB2
2 OVB3
1 OVB4
15 VGND
10 OCH1
12 OCH2
17 VGND
22 OSUB
21 V15V
9 SUB2_R
25 CCD+16V
11 CAM5R6V
13 CCD-9V
19 VGND
7 SUB2_G
5 SUB2_B
24 OR
18 HGND
28 OH1
30 OH2
20 HGND
29 CLMP
27 SMPL
23 H5V
26 HCLR
Q515
2SD601A-QRTW
Q516
2SD601A-QRTW
Q517
2SD601A-QRTW
VR504
50K/VR5
VR505
50K/VR5
VR506
50K/VR5
H5V
V5V
Q518
2SD1280-RTW
Q519
2SB709A-QRTW
Q520
2SB956-QRTW
Q521
2SD601A-QRTW
Q522
2SB956-QRTW
Q523
2SD601A-QRTW
IC507
TL062CPS-L
IC508
TL062CPS-L
IC509
*PAT
(NJM431U)
IC510
*PAT
(NJM431U)
CTP38
CTP39
CTP40
Q513
2SC3735B35T2
Q514
2SB709A-QRTW
D503
MA152K-TW
D506
D507
D508
MA151K-TW
R532
47/J3
C523
6800P/UBV
R609
47/J3
R533
1M/J3
C524
6V22/EVV
C530
47P/UV
C554
47P/UV
R548
33K/J3
R549
10K/J3
R550
33K/J3
R551
1000/J3
C531
50V10
C557
50V3R3/EVN
R555
4700/J3
R556
4700/J3
R557
4700/J3
R561
1000/J3
R567
1000/J3
R573
1000/J3
R572
3300/J3


IC505
74AC04SJ
4
3
8
9
6
5
12
13

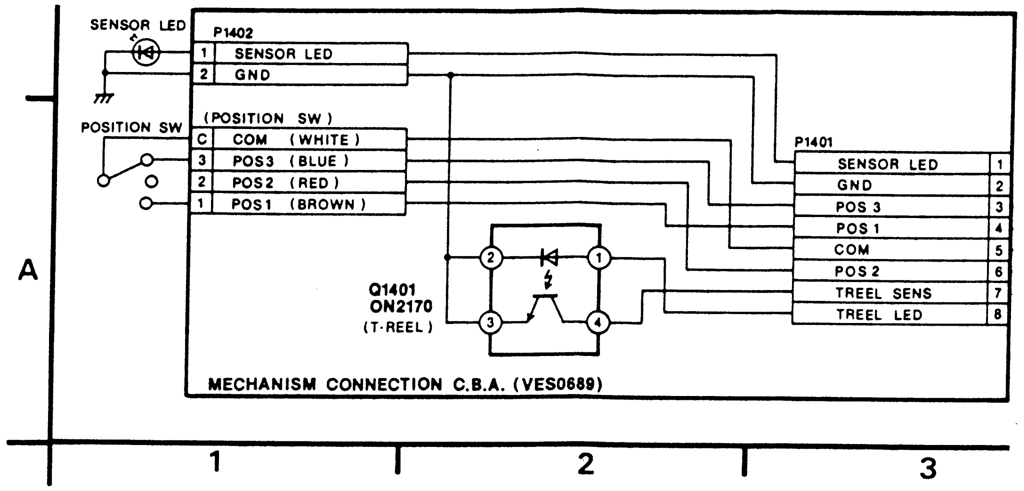

H5V
L501
VLP0147
L502
VLP0147
L503
VLP0147
L504
VLP0147
IC503
74AC04SJ
IC504
74AC04SJ
IC505
74AC04SJ
IC506
74AC04SJ
C546
0.1/UFV
C547
0.1/UFV
C548
0.1/UFV
C549
0.1/UFV
C560
6V100/HFQ
C561
6V100/HFQ
C562
6V100/HFQ
C563
6V100/HFQ
14
7
GND

*=REFER TO THE COMPARISON CHART

Ref No.500 Series.

MECHANISM CONNECTION SCHEMATIC DIAGRAM 1／1

（E37:Page CBA-16）


A
SENSOR LED
POSITION SW
P1402
1 SENSOR LED
2 GND
(POSITION SW)
C COM (WHITE)
3 POS3 (BLUE)
2 POS2 (RED)
1 POS1 (BROWN)
P1401
SENSOR LED 1
GND 2
POS 3 3
POS 1 4
COM 5
POS 2 6
TREEL SENS 7
TREEL LED 8
Q1401
ON2170
(T-REEL)
MECHANISM CONNECTION C.B.A. (VES0689)
1
2
3

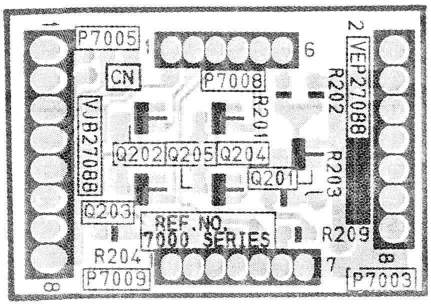
SECTION 4

CIRCUIT BOARDS

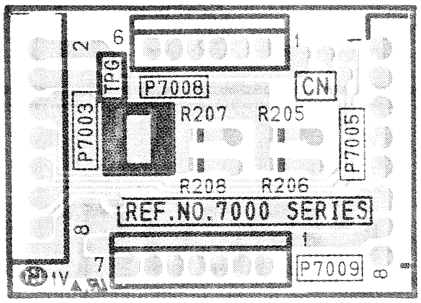
CONTENTS

CN C.B.A.(E3) ········ CBA-2
CRT MASK C.B.A. (E5) ········ CBA-2
DC INPUT C.B.A. (E9) ········ CBA-2
26P OUT C.B.A. (E7) ········ CBA-2
H DEF C.B.A. (E1) ········ CBA-3
V DEF C.B.A. (E2) ········ CBA-3
OPERATE C.B.A. (E24) ········ CBA-3
FRONT C.B.A. (E4) ········ CBA-4
VIDEO SUB C.B.A. (E12) ········ CBA-4
BATTERY C.B.A. (E23) ········ CBA-4
MODE CHECK C.B.A. (E25) ········ CBA-4
POWER SW C.B.A. (E26) ········ CBA-4
CAM BUFFER C.B.A. (E17) ········ CBA-4
VTR START C.B.A. (E21) ········ CBA-4
MONITOR VR C.B.A. (E28) ········ CBA-4
CAMERA OUT C.B.A. (E32) ········ CBA-5
TOGGLE SW C.B.A. (E29) ········ CBA-5
SUPER IRIS C.B.A. (E27) ········ CBA-5
AV OUT C.B.A. (E8) ········ CBA-5
GEN LOCK C.B.A. (E31) ········ CBA-5
D／S SUB C.B.A. (E16) ········ CBA-5
D SUB 2 C.B.A. (E18) ········ CBA-5
CCD PULSE C.B.A. (E19) ········ CBA-6
CCD DRIVE C.B.A. (E20) ········ CBA-7
MECH INTERFACE C.B.A. (E14) ········ CBA-8
REAR JACK C.B.A. (E6) ········ CBA-9
PROCESS C.B.A. (E15) ········ CBA-10
AUDIO／SYSCON C.B.A. (E13) ········ CBA-13
VIDEO C.B.A. (E11) ········ CBA-14
POWER C.B.A. (E10) ········ CBA-15
LCD C.B.A. (E30) ········ CBA-16
MECHANISM CONNECTION C.B.A. (E37) ········ CBA-16

CN C.B.A.(E3)

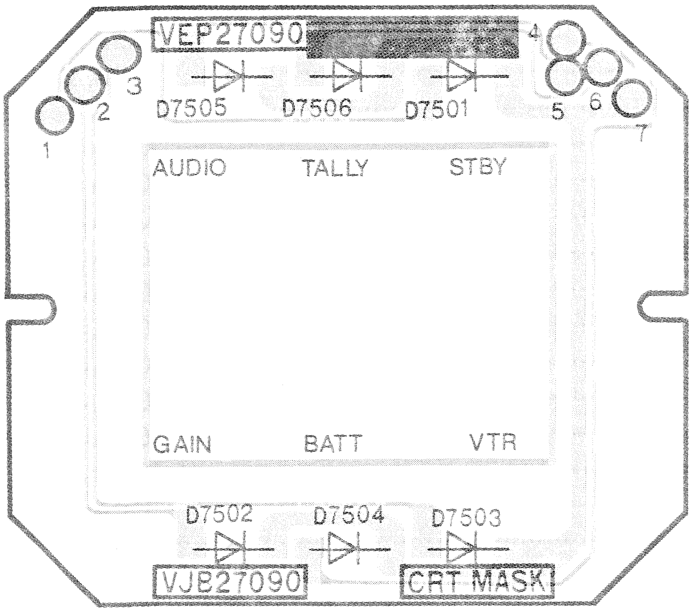

P7005
CN
P7008
VJB27088
VEP27088
R202
R201
Q202
Q205
Q204
Q201
R203
Q203
REF.NO.
7000 SERIES
R204
R209
P7009
P7003
1
6
2
7
8

(FOIL SIDE)

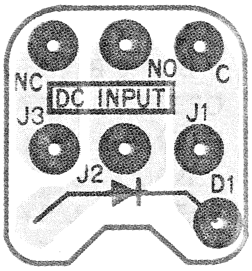

6
1
2
TPG
P7008
CN
P7003
R207
R205
P7005
R208
R206
REF.NO.7000 SERIES
8
7
P7009
1V

(COMPONENT SIDE)

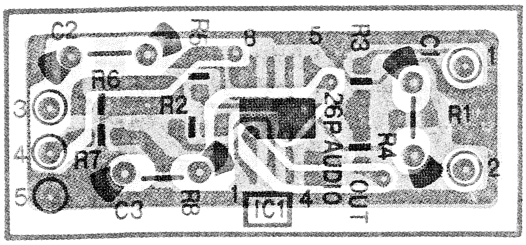
CRT MASK C.B.A. (E5)


VEP27090
1
2
3
4
5
6
7
D7505
D7506
D7501
AUDIO
TALLY
STBY
GAIN
BATT
VTR
D7502
D7504
D7503
VJB27090
CRT MASK

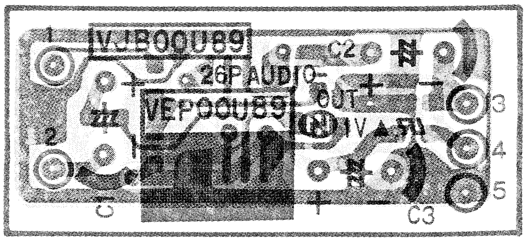
DC INPUT C.B.A. (E9)


NC
NO
C
DC INPUT
J3
J1
J2
D1

26P OUT C.B.A. (E7)

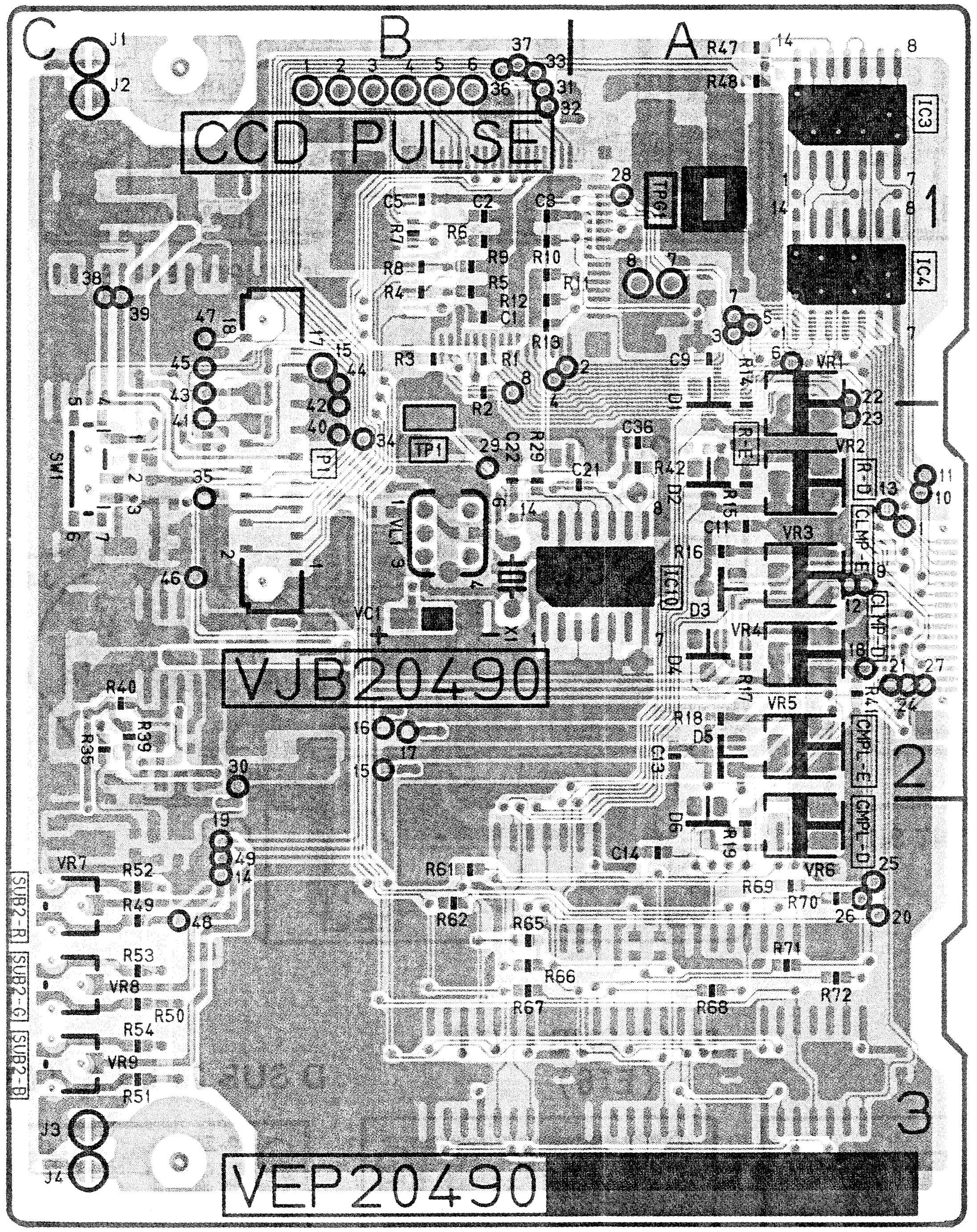

C2
R5
8
5
R3
C1
1
R6
R2
26P AUDIO OUT
R1
3
4
R4
R7
2
5
C3
R8
IC1
1
4

(FOIL SIDE)

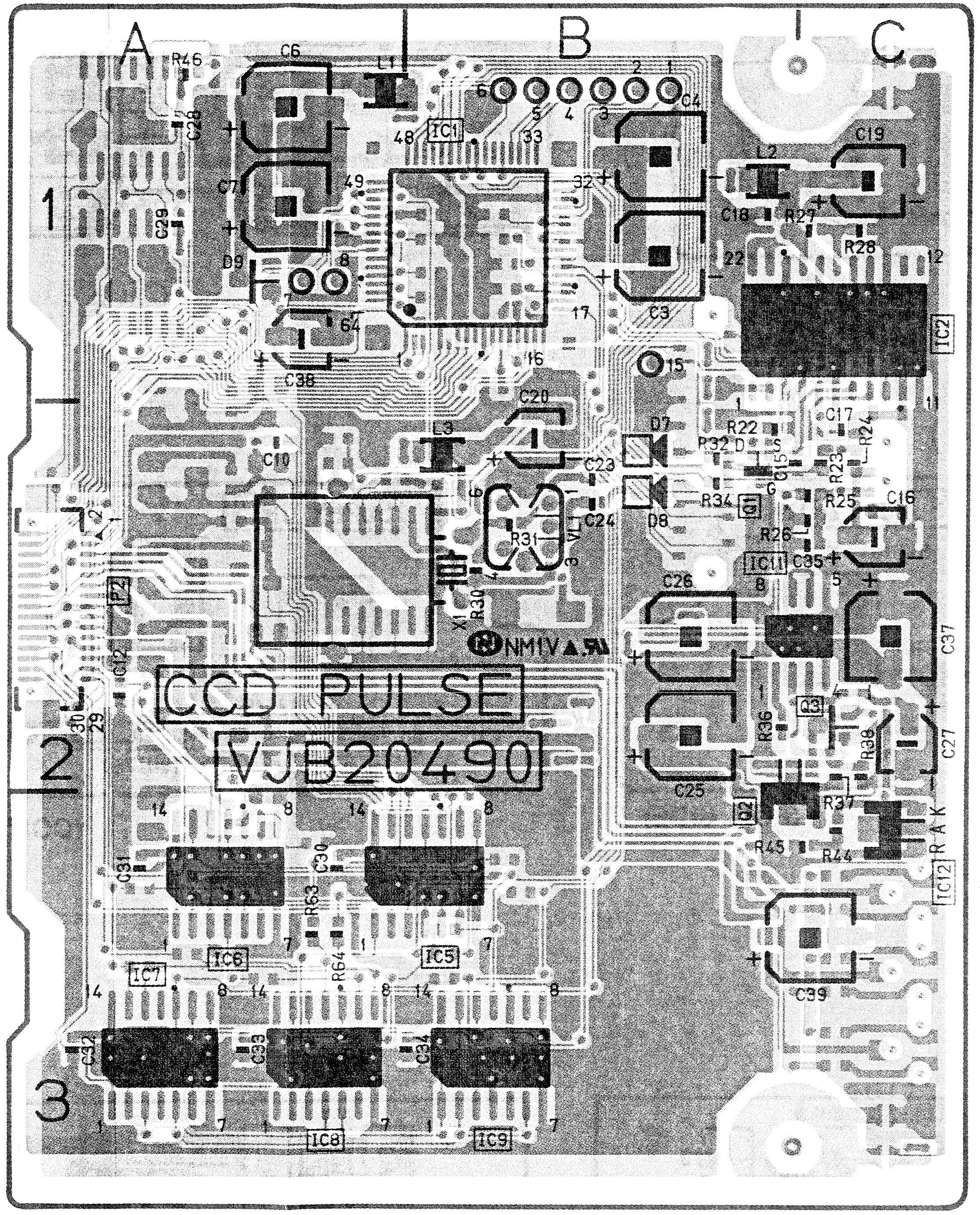

1
VJB00U89
C2
26P AUDIO-OUT
VEP00U89
1V
3
2
4
5
C1
1
C3

(COMPONENT SIDE)

CCD PULSE C.B.A. (E19)


C
B
A
1
2
3
CCD PULSE
VJB20490
VEP20490
J1
J2
J3
J4
SW1
TP1
TPG1
P1
IC3
IC4
IC10
VR1
VR2
VR3
VR4
VR5
VR6
VR7
VR8
VR9
VL1
VC1
SUB2-R
SUB2-G
SUB2-B
R-E
R-D
CLMP-E
CLMP-D
CMPL-E
CMPL-D

(FOIL SIDE)

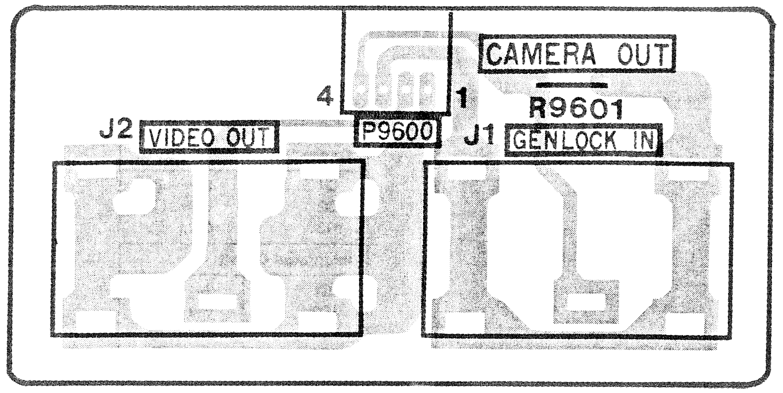

A
B
C
1
2
3
CCD PULSE
VJB20490
IC1
IC2
IC5
IC6
IC7
IC8
IC9
IC11
IC12
Q1
Q2
Q3
P2
L1
L2
L3
D7
D8
D9
X1
VL1
NM1V

(COMPONENT SIDE)

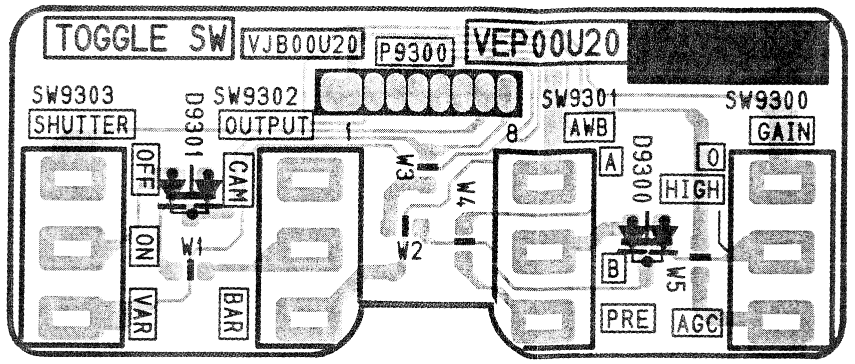
CCD PULSE C.B.A.	
Transistor	
Q1	B-2 Ⓒ
Q2	B-3 Ⓒ
Q3	C-2 Ⓒ
Integrated Circuit	
IC1	B-1 Ⓒ
IC2	C-1 Ⓒ
IC3	A-1 Ⓕ
IC4	A-1 Ⓕ
IC5	B-3 Ⓒ
IC6	A-3 Ⓒ
IC7	A-3 Ⓒ
IC8	A-3 Ⓒ
IC9	B-3 Ⓒ
IC10	A-2 Ⓕ
IC11	C-2 Ⓒ
Test Point	
TP1	B-2 Ⓕ
TPG1	A-1 Ⓕ
Adjustment	
VL1	B-2 Ⓕ
VL1	B-2 Ⓒ
VR1	A-1 Ⓕ
VR2	A-2 Ⓕ
VR3	A-2 Ⓕ
VR4	A-2 Ⓕ
VR5	A-2 Ⓕ
VR6	A-3 Ⓕ
VR7	B-3 Ⓕ
VR8	B-3 Ⓕ
VR9	B-3 Ⓕ
Connector	
P1	B-2 Ⓕ
P2	A-2 Ⓒ

ADDRESS INFORMATION
Ⓕ...FOIL SIDE
Ⓒ...COMPONENT SIDE

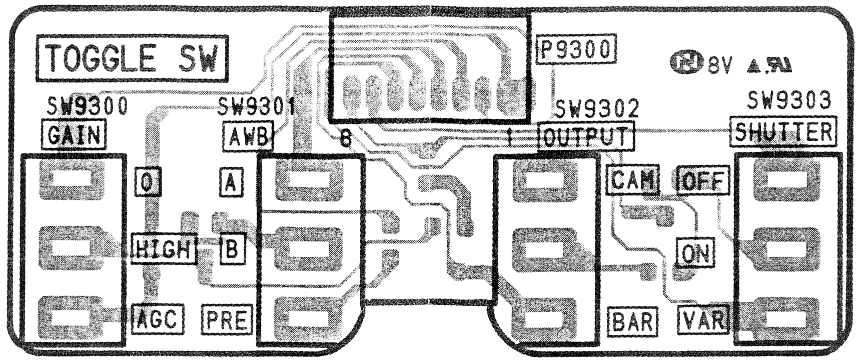
CAMERA OUT C.B.A. (E32)


CAMERA OUT
4
1
R9601
J2
VIDEO OUT
P9600
J1
GENLOCK IN

TOGGLE SW C.B.A. (E29)

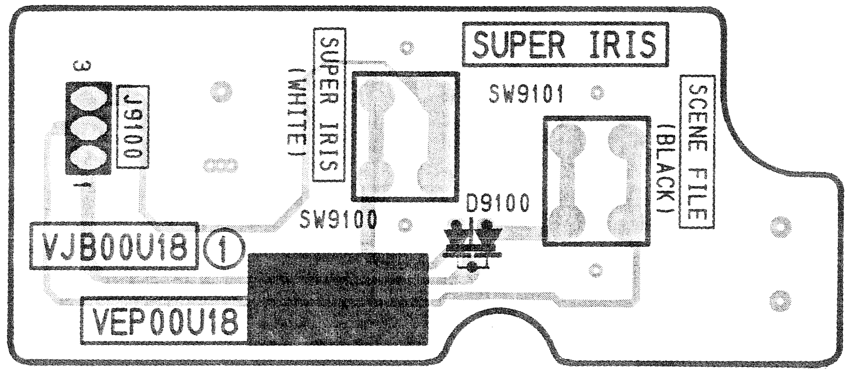

TOGGLE SW
VJB00U20
P9300
VEP00U20
SW9303
SHUTTER
D9301
SW9302
OUTPUT
SW9301
AWB
SW9300
GAIN
OFF
CAM
ON
W1
VAR
BAR
W3
W4
W2
8
1
A
O
D9300
HIGH
B
W5
PRE
AGC

(FOIL SIDE)

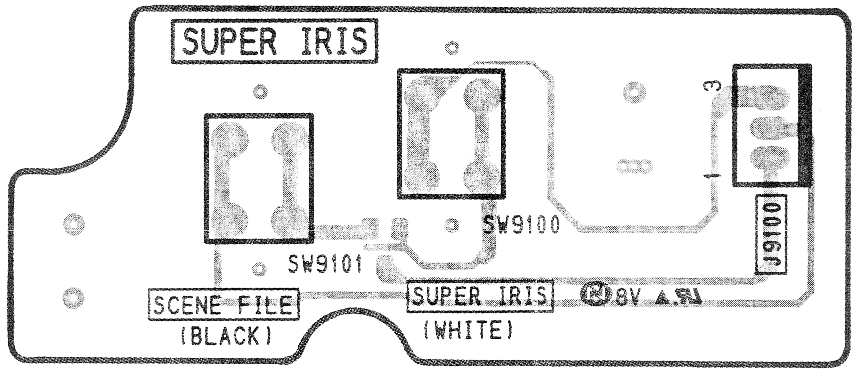

TOGGLE SW
P9300
8V
SW9300
GAIN
SW9301
AWB
SW9302
OUTPUT
SW9303
SHUTTER
O
A
8
1
CAM
OFF
HIGH
B
ON
AGC
PRE
BAR
VAR

(COMPONENT SIDE)

SUPER IRIS C.B.A. (E27)

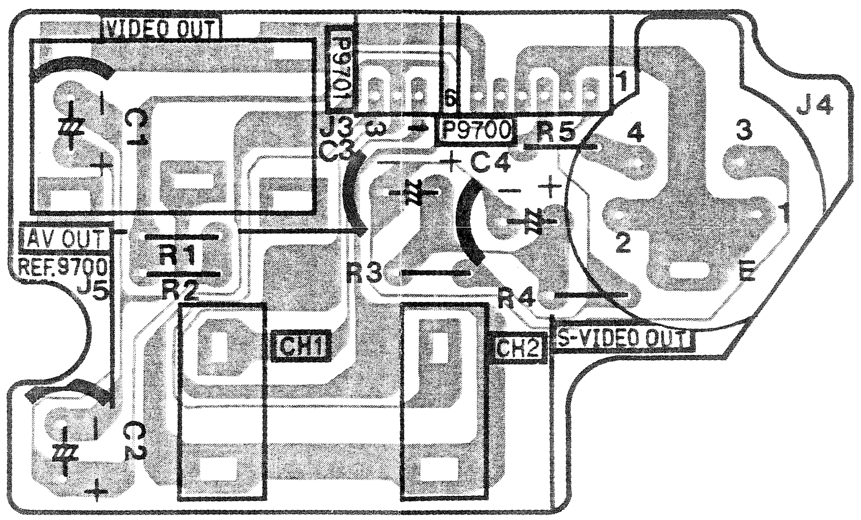

3
J9100
1
SUPER IRIS (WHITE)
SUPER IRIS
SW9101
SCENE FILE (BLACK)
SW9100
D9100
VJB00U18
VEP00U18

(FOIL SIDE)

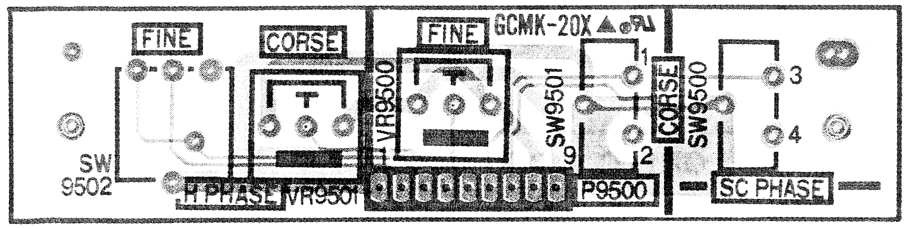

SUPER IRIS
3
1
J9100
SW9100
SW9101
SCENE FILE (BLACK)
SUPER IRIS (WHITE)
8V

(COMPONENT SIDE)

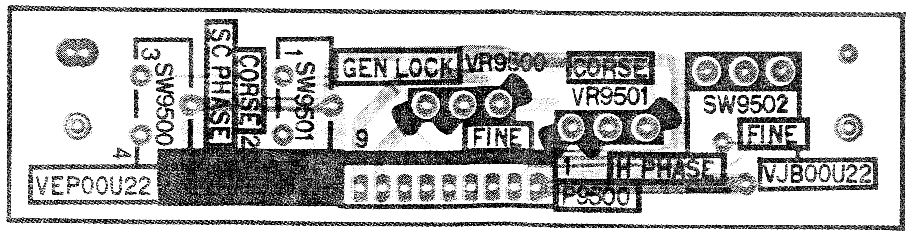
AV OUT C.B.A. (E8)


VIDEO OUT
P9701
6
1
J4
C1
J3
3
P9700
R5
4
3
C3
C4
AV OUT
REF.9700
R1
J5
R2
R3
2
1
R4
E
CH1
CH2
S-VIDEO OUT
C2

GEN LOCK C.B.A. (E31)

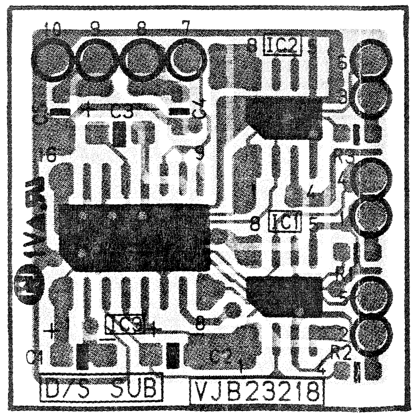

FINE
CORSE
FINE
GCMK-20X
SW
9502
VR9500
SW9501
1
CORSE
SW9500
3
4
2
9
H PHASE
VR9501
P9500
SC PHASE

(FOIL SIDE)

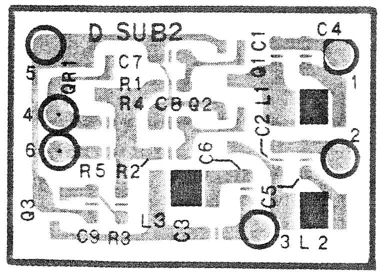

3
SW9500
4
SC PHASE
CORSE
2
1
SW9501
9
GEN LOCK
VR9500
CORSE
VR9501
FINE
SW9502
FINE
VEP00U22
1
H PHASE
P9500
VJB00U22

(COMPONENT SIDE)

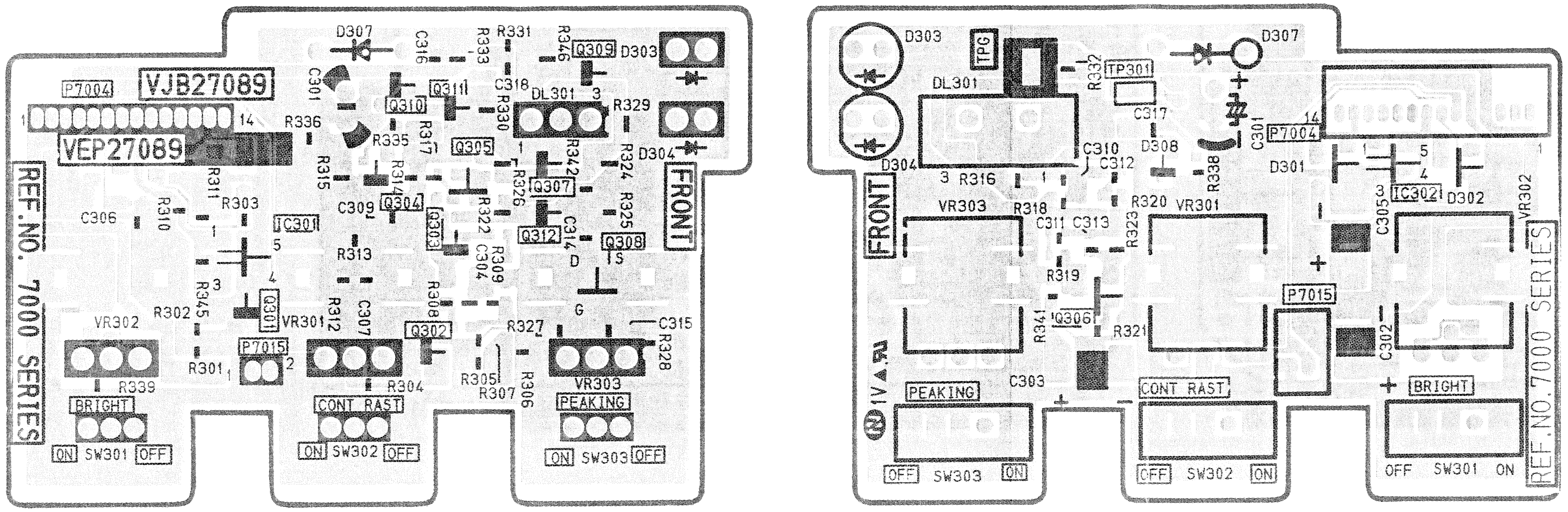
D/S SUB C.B.A. (E16)


10
9
8
7
IC2
C3
C4
16
9
IC1
8
IC3
C1
C2
R2
D/S SUB
VJB23218

D SUB 2 C.B.A. (E18)


D SUB2
C4
C1
C7
R1
5
Q1
1
R4
C8
Q2
4
L1
C2
6
2
C6
R5
R2
C5
Q3
L3
C3
C9
R3
3
L2

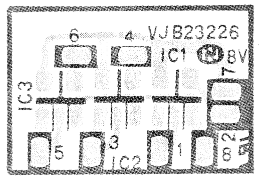
FRONT C.B.A. (E4)


VJB27089
VEP27089
P7004
REF.NO. 7000 SERIES
FRONT
D307
D303
D304
DL301
IC301
IC302
Q302
Q304
Q305
Q306
Q307
Q308
Q309
Q310
Q311
Q312
VR301
VR302
VR303
P7015
BRIGHT
CONT RAST
PEAKING
SW301
SW302
SW303
ON
OFF
TP301
TPG

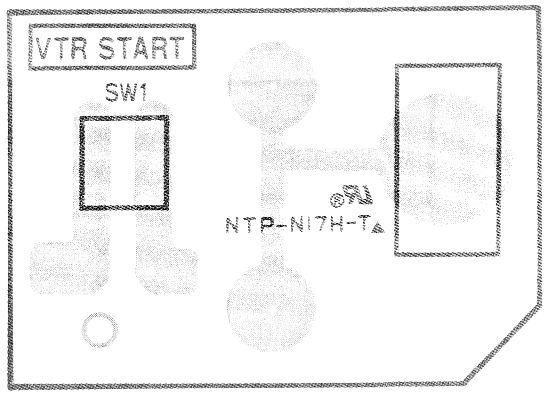
(FOIL SIDE)

(COMPONENT SIDE)

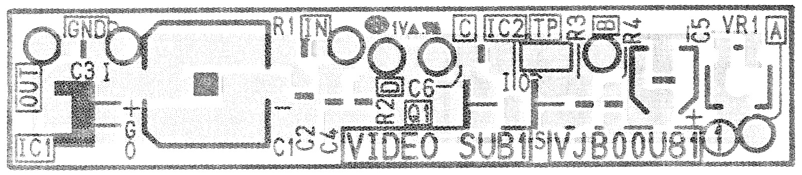
CAM BUFFER C.B.A. (E17)


VJB23226
IC1
IC2
IC3
8V

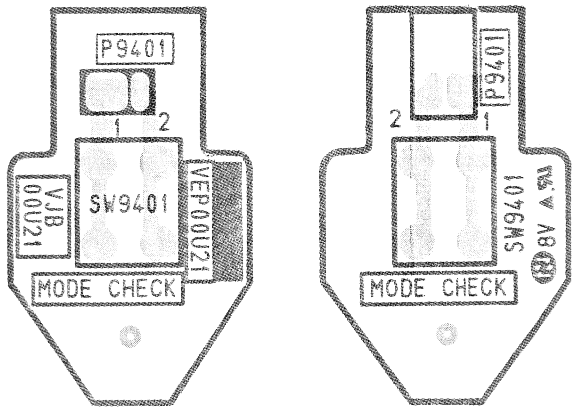
VTR START C.B.A. (E21)


VTR START
SW1
NTP-N17H-T

VIDEO SUB C.B.A. (E12)


GND
R1
IN
IC2
TP
R3
R4
C5
VR1
A
C3
OUT
IC1
C6
Q1
VIDEO SUB1
VJB00U81

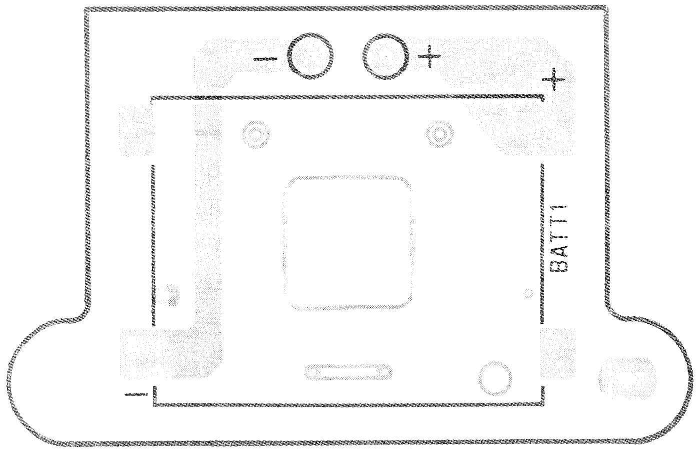
MODE CHECK C.B.A. (E25)


P9401
SW9401
VJB 00U21
VEP00U21
MODE CHECK
8V

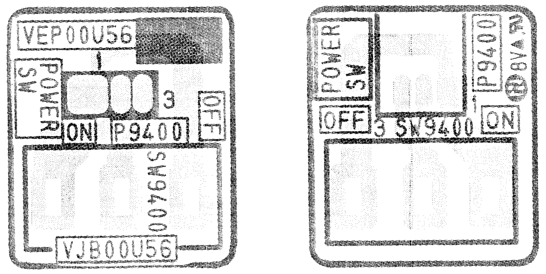
(FOIL SIDE)

(COMPONENT SIDE)

BATTERY C.B.A. (E23)



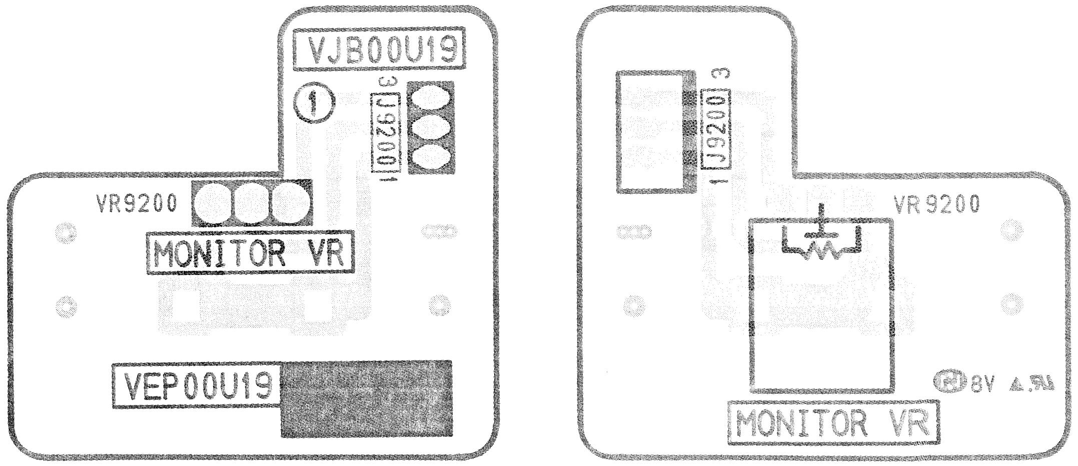
POWER SW C.B.A. (E26)


VEP00U56
POWER SW
ON
OFF
P9400
SW9400
VJB00U56
8V

(FOIL SIDE)

(COMPONENT SIDE)

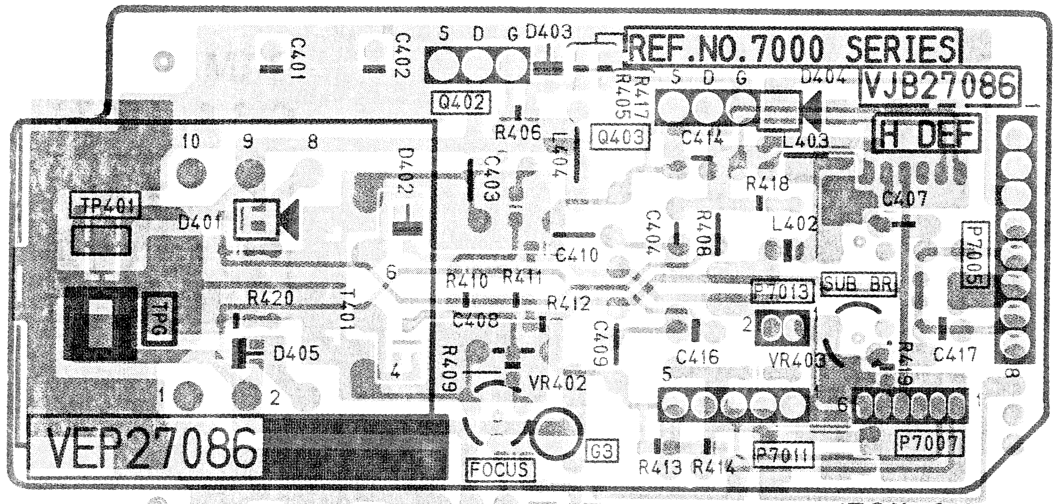
MONITOR VR C.B.A. (E28)


VJB00U19
J9200
VR9200
MONITOR VR
VEP00U19
8V

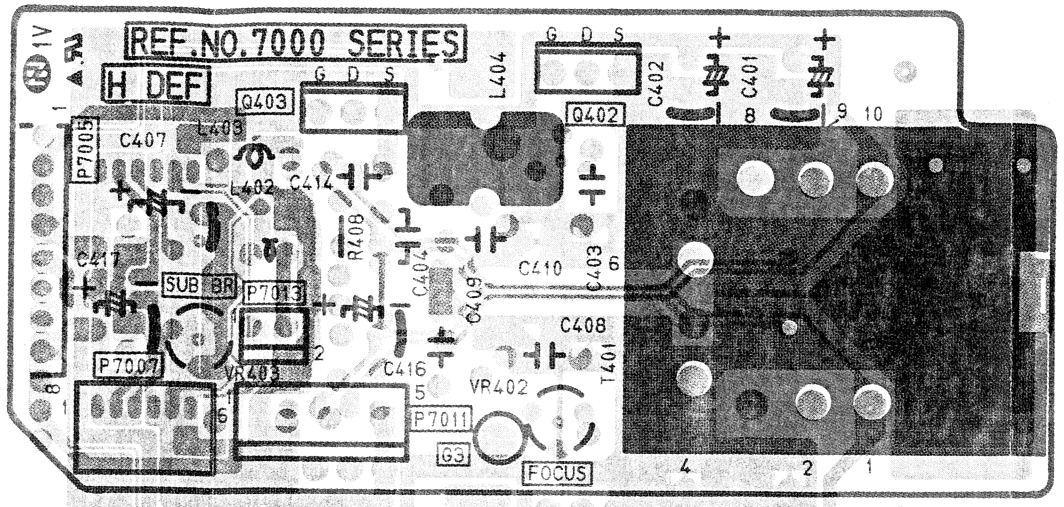
(FOIL SIDE)

(COMPONENT SIDE)

H DEF C.B.A. (E1)

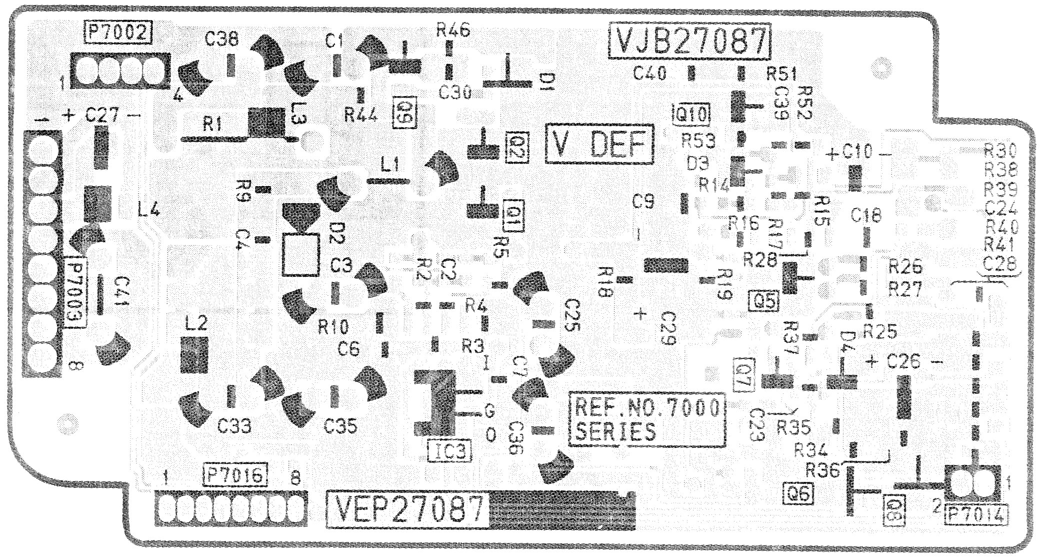

REF.NO.7000 SERIES
VJB27086
H DEF
VEP27086
TP401
TPG
D401
D402
D403
D404
D405
T401
Q402
Q403
C401
C402
C403
C404
C407
C408
C409
C410
C414
C416
C417
R405
R406
R408
R409
R410
R411
R412
R413
R414
R417
R418
R419
R420
L402
L403
L404
VR402
VR403
SUB BR
P7005
P7007
P7011
P7013
FOCUS
G3
S D G

(FOIL SIDE)

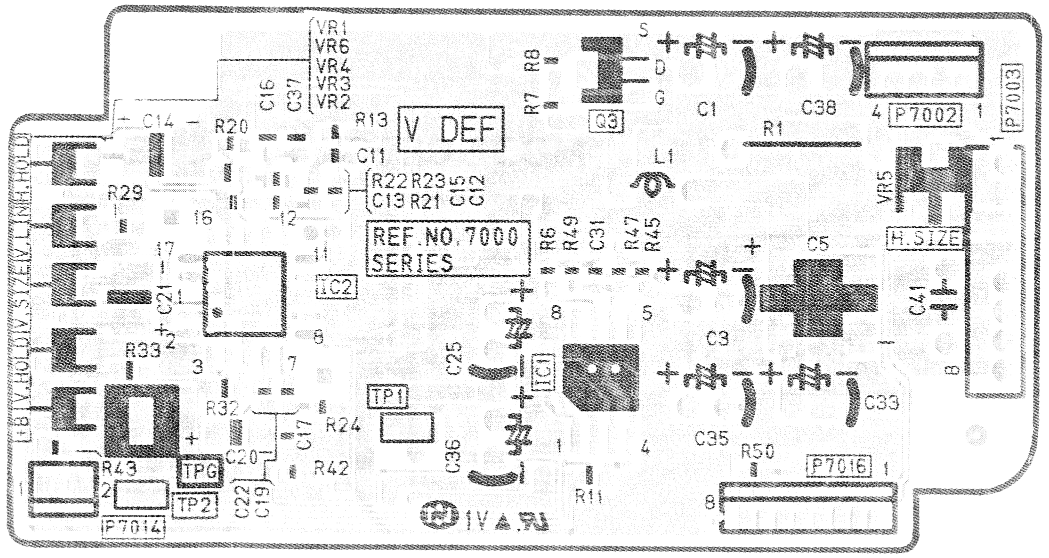

REF.NO.7000 SERIES
H DEF
1V
Q402
Q403
L402
L403
L404
C401
C402
C403
C404
C407
C408
C409
C410
C414
C416
C417
R408
T401
VR402
VR403
SUB BR
P7005
P7007
P7011
P7013
FOCUS
G3
G D S

(COMPONENT SIDE)

V DEF C.B.A. (E2)

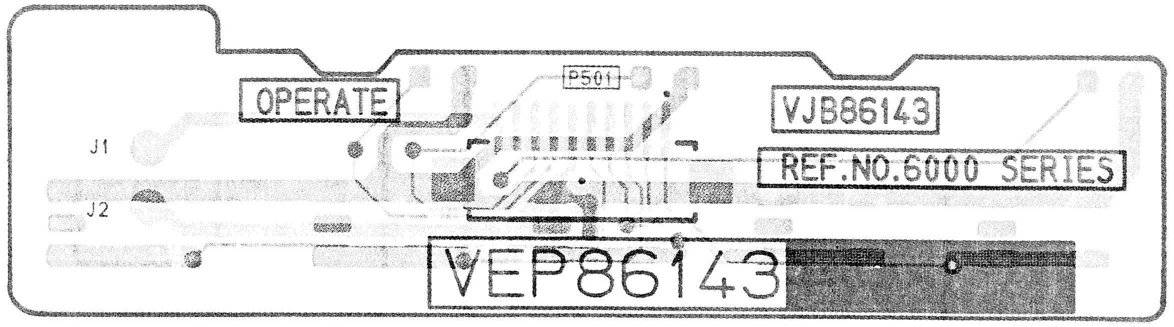

VJB27087
V DEF
REF.NO.7000 SERIES
VEP27087
P7002
P7003
P7014
P7016
IC3
Q1
Q2
Q5
Q6
Q7
Q8
Q9
Q10
D1
D2
D3
D4
L1
L2
L3
L4
C1
C2
C3
C4
C6
C7
C9
C10
C18
C23
C24
C25
C26
C27
C28
C29
C30
C33
C35
C36
C38
C39
C40
C41
R1
R2
R3
R4
R5
R9
R10
R14
R15
R16
R17
R18
R19
R25
R26
R27
R28
R30
R34
R35
R36
R37
R38
R39
R40
R41
R44
R46
R51
R52
R53

(FOIL SIDE)

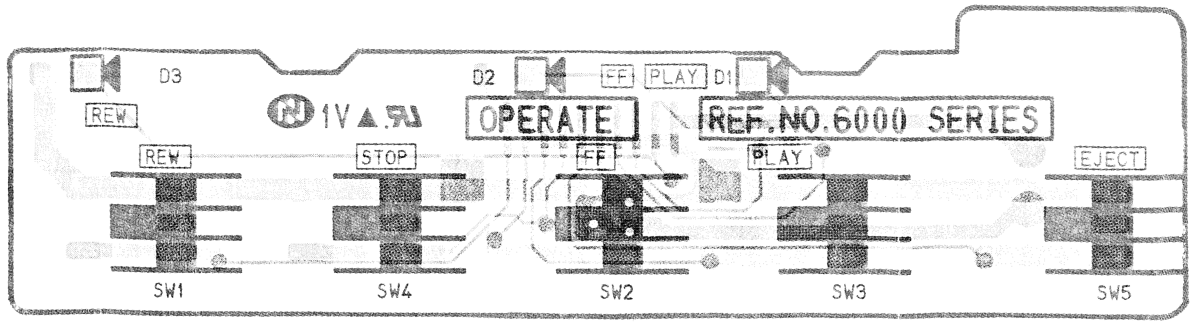

V DEF
REF.NO.7000 SERIES
VR1
VR2
VR3
VR4
VR5
VR6
H.SIZE
V.HOLD
V.SIZE
V.LIN
H.HOLD
IC1
IC2
Q3
TP1
TP2
TPG
L1
C1
C3
C5
C11
C12
C13
C14
C15
C16
C17
C19
C20
C21
C22
C25
C33
C35
C36
C37
C38
C41
R1
R6
R7
R8
R11
R13
R20
R21
R22
R23
R24
R29
R32
R33
R42
R43
R45
R47
R49
R50
P7002
P7003
P7014
P7016
1V

(COMPONENT SIDE)

OPERATE C.B.A. (E24)

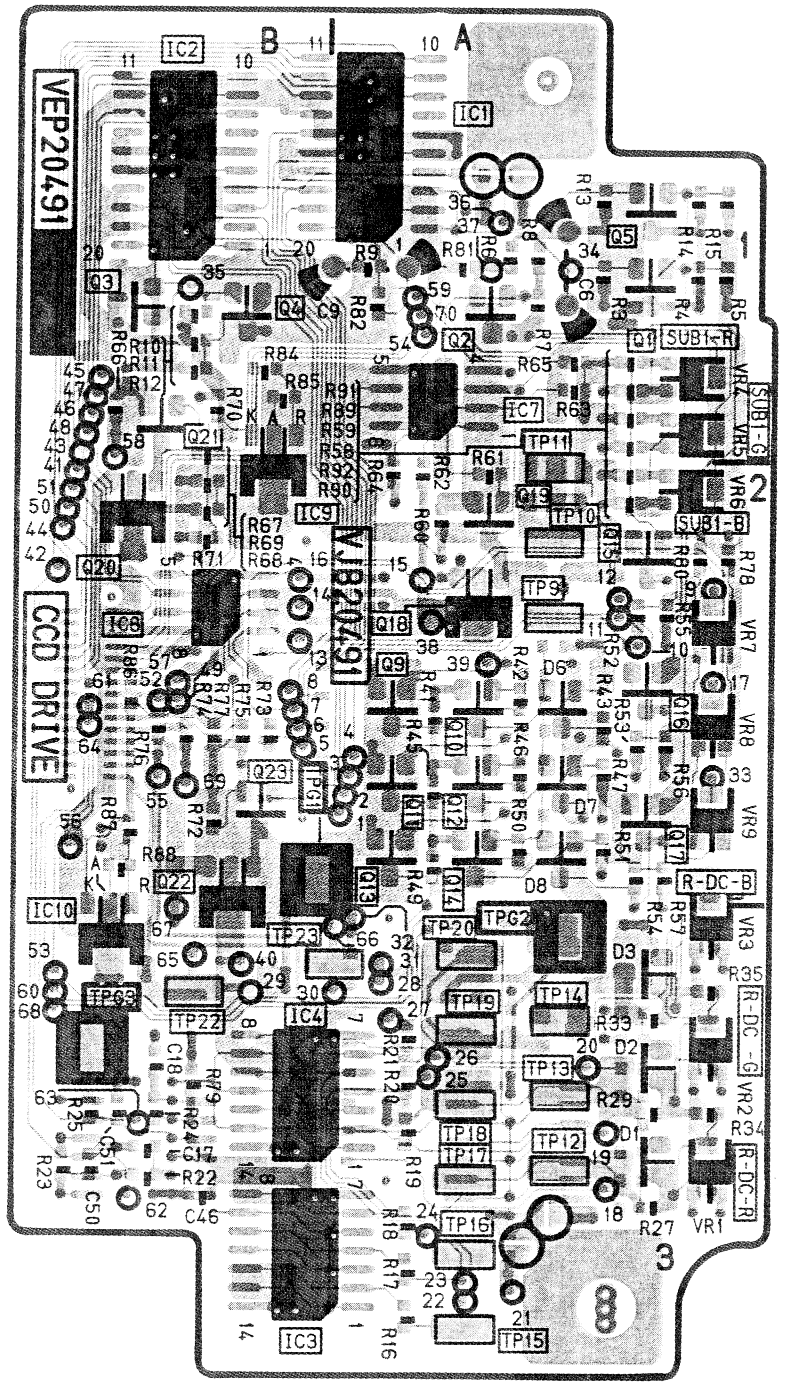

OPERATE
P501
VJB86143
REF.NO.6000 SERIES
VEP86143
J1
J2

(FOIL SIDE)


D1
D2
D3
REW
FF
PLAY
1V
OPERATE
REF.NO.6000 SERIES
REW
STOP
FF
PLAY
EJECT
SW1
SW4
SW2
SW3
SW5

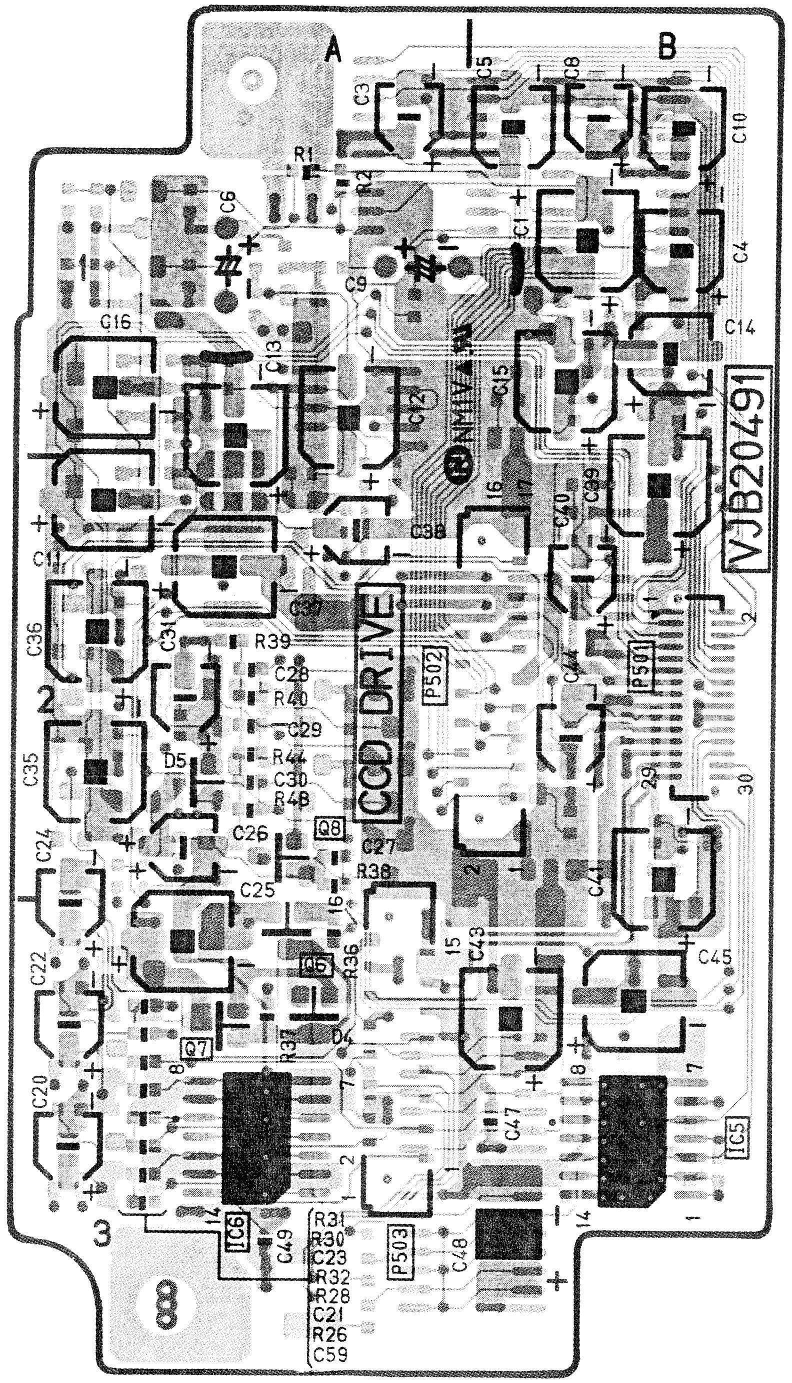
(FOIL SIDE)

CCD DRIVE C.B.A. (E20)



VEP20491
CCD DRIVE
VJB20491
A
B
2
3
IC1
IC2
IC3
IC4
IC7
IC8
IC9
IC10

(FOIL SIDE)



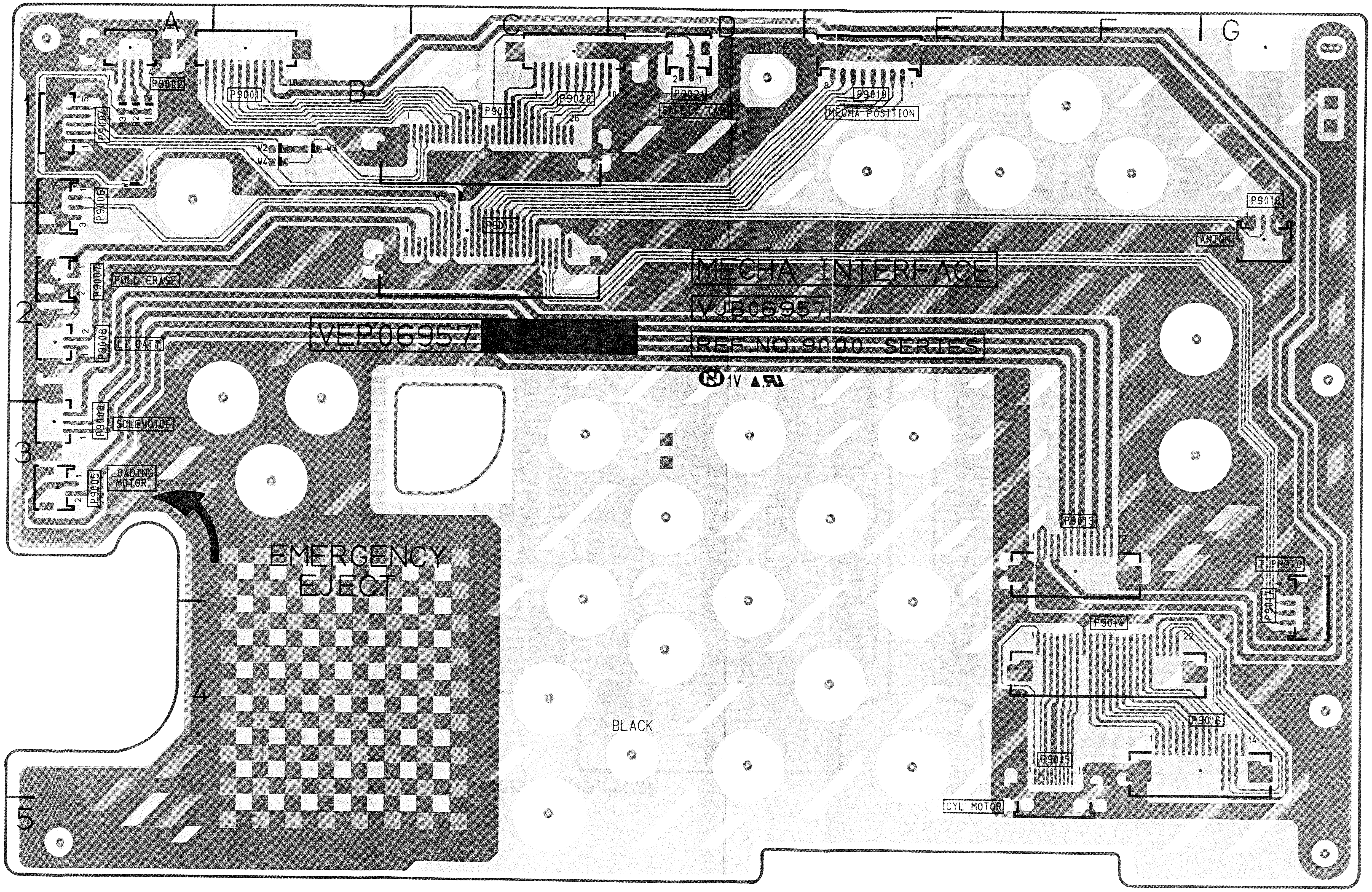
A
B
2
3
VJB20491
CCD DRIVE
P501
P502
P503
IC5
IC6

(COMPONENT SIDE)

CCD DRIVE C.B.A.		
Transistor		
Q501	A-1	Ⓕ
Q502	A-1	Ⓕ
Q503	B-1	Ⓕ
Q504	B-1	Ⓕ
Q506	A-3	Ⓒ
Q507	A-3	Ⓒ
Q508	A-2	Ⓒ
Q509	A-2	Ⓕ
Q510	A-2	Ⓕ
Q511	A-2	Ⓕ
Q512	A-2	Ⓕ
Q513	A-2	Ⓕ
Q514	A-2	Ⓕ
Q515	A-2	Ⓕ
Q516	A-2	Ⓕ
Q517	A-2	Ⓕ
Q518	A-2	Ⓕ
Q519	A-2	Ⓕ
Q520	B-2	Ⓕ
Q521	B-1	Ⓕ
Q522	B-2	Ⓕ
Q523	B-2	Ⓕ
Integrated Circuit		
IC501	A-1	Ⓕ
IC502	B-1	Ⓕ
IC503	B-3	Ⓕ
IC504	B-3	Ⓕ
IC505	B-3	Ⓒ
IC506	A-3	Ⓒ
IC507	A-1	Ⓕ
IC508	B-2	Ⓕ
Test Point		
TP509	A-2	Ⓕ
TP510	A-2	Ⓕ
TP511	A-2	Ⓕ
TP512	A-3	Ⓕ
TP513	A-3	Ⓕ
TP514	A-3	Ⓕ
TP515	A-3	Ⓕ
TP516	A-3	Ⓕ
TP517	A-3	Ⓕ
TP518	A-3	Ⓕ
TP519	A-3	Ⓕ
TP520	A-3	Ⓕ
TP522	B-3	Ⓕ
TP523	A-3	Ⓕ
TPG501	B-2	Ⓕ
TPG502	A-3	Ⓕ
TPG503	B-3	Ⓕ
Adjustment		
VR504	A-1	Ⓕ
VR505	A-1	Ⓕ
VR506	A-2	Ⓕ
VR507	A-2	Ⓕ
VR508	A-2	Ⓕ
VR509	A-2	Ⓕ
Connector		
P501	B-2	Ⓒ
P502	B-2	Ⓒ
P503	A-3	Ⓒ

ADDRESS INFORMATION
Ⓕ...FOIL SIDE
Ⓒ...COMPONENT SIDE

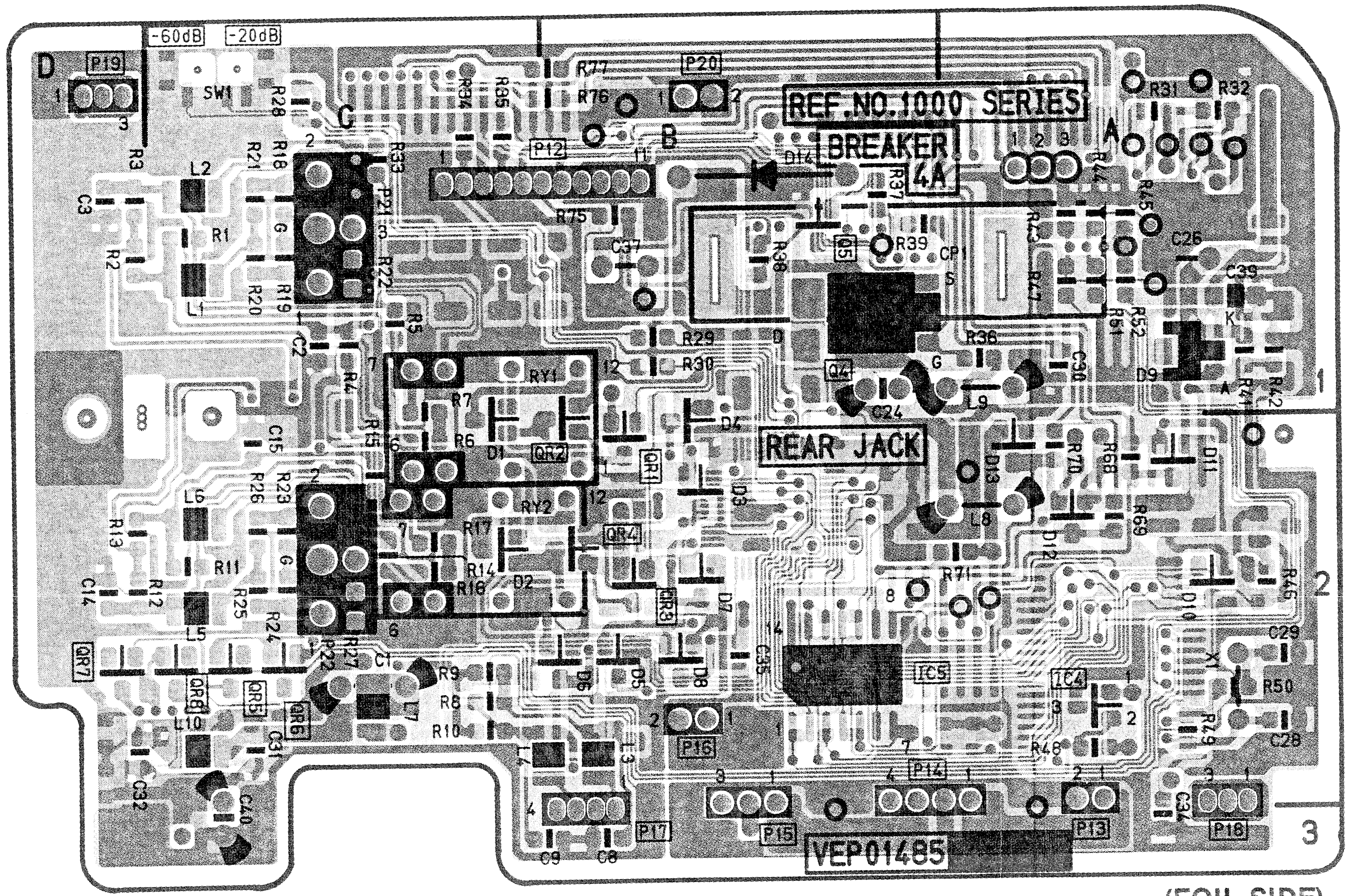
MECH INTERFACE C.B.A. (E14)


A
B
C
D
E
F
G
1
2
3
4
5
P9002
P9001
P9011
P9020
P9021
SAFETY TAB
WHITE
P9019
MECHA POSITION
P9004
R3
R2
R1
W1
W2
W3
W4
W5
P9006
P9012
P9018
ANTON
P9007
FULL ERASE
P9008
LI BATT
P9003
SOLENOIDE
P9005
LOADING MOTOR
MECHA INTERFACE
VJB06957
VEP06957 [redacted]
REF.NO.9000 SERIES
1V
EMERGENCY EJECT
BLACK
P9013
T PHOTO
P9017
P9014
P9016
P9015
CYL MOTOR

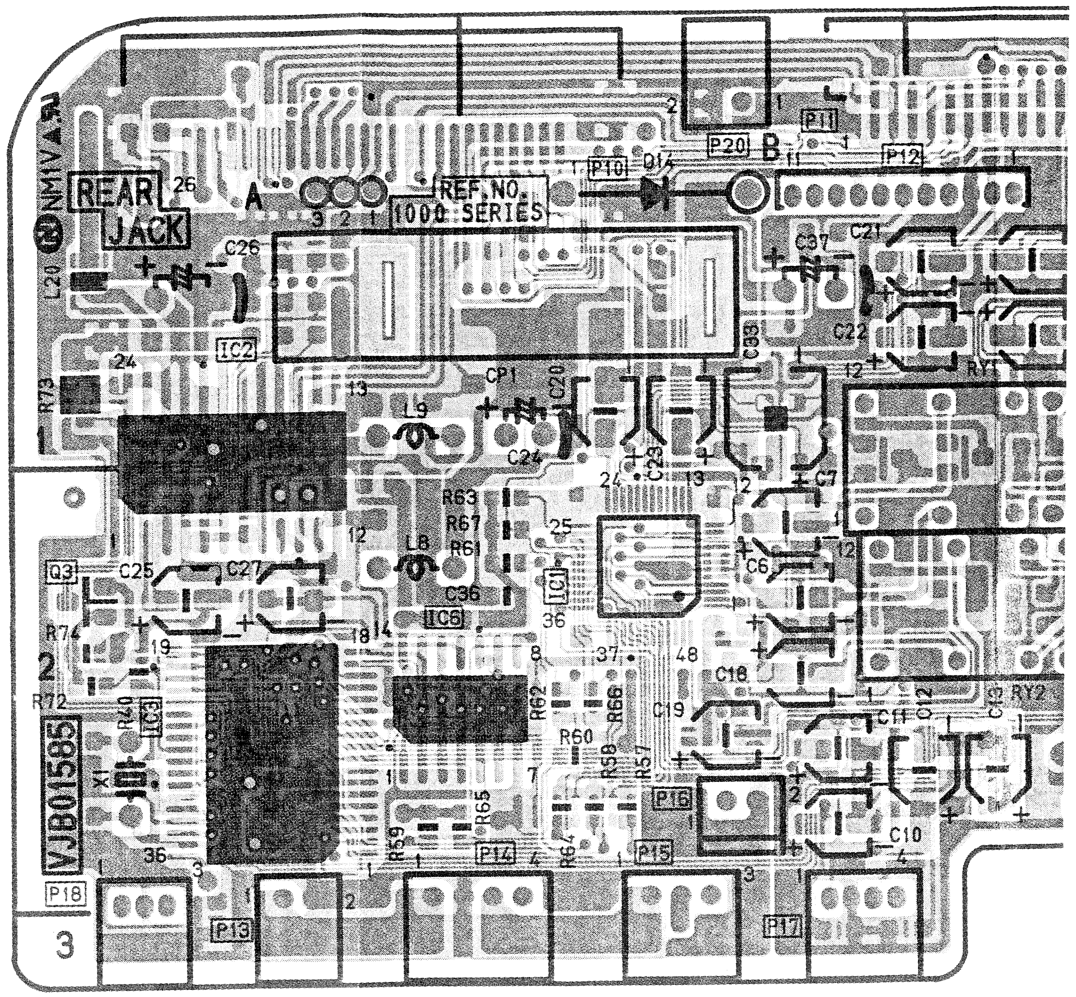
MECHA INTERFACE C.B.A.	
Connector	
P9001	B-1
P9002	A-1
P9003	A-3
P9004	A-1
P9005	A-3
P9006	A-2
P9007	A-2
P9008	A-2
P9011	C-1
P9012	C-2
P9013	F-3
P9014	F-4
P9015	F-4
P9016	G-4
P9017	G-3
P9018	G-2
P9019	E-1
P9020	C-1
P9021	D-1

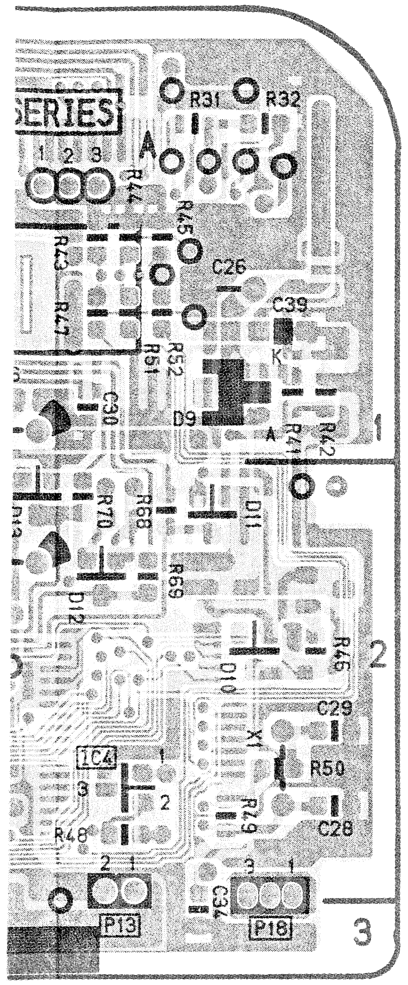
ADDRESS INFORMATION

REAR JACK C.B.A. (E6)

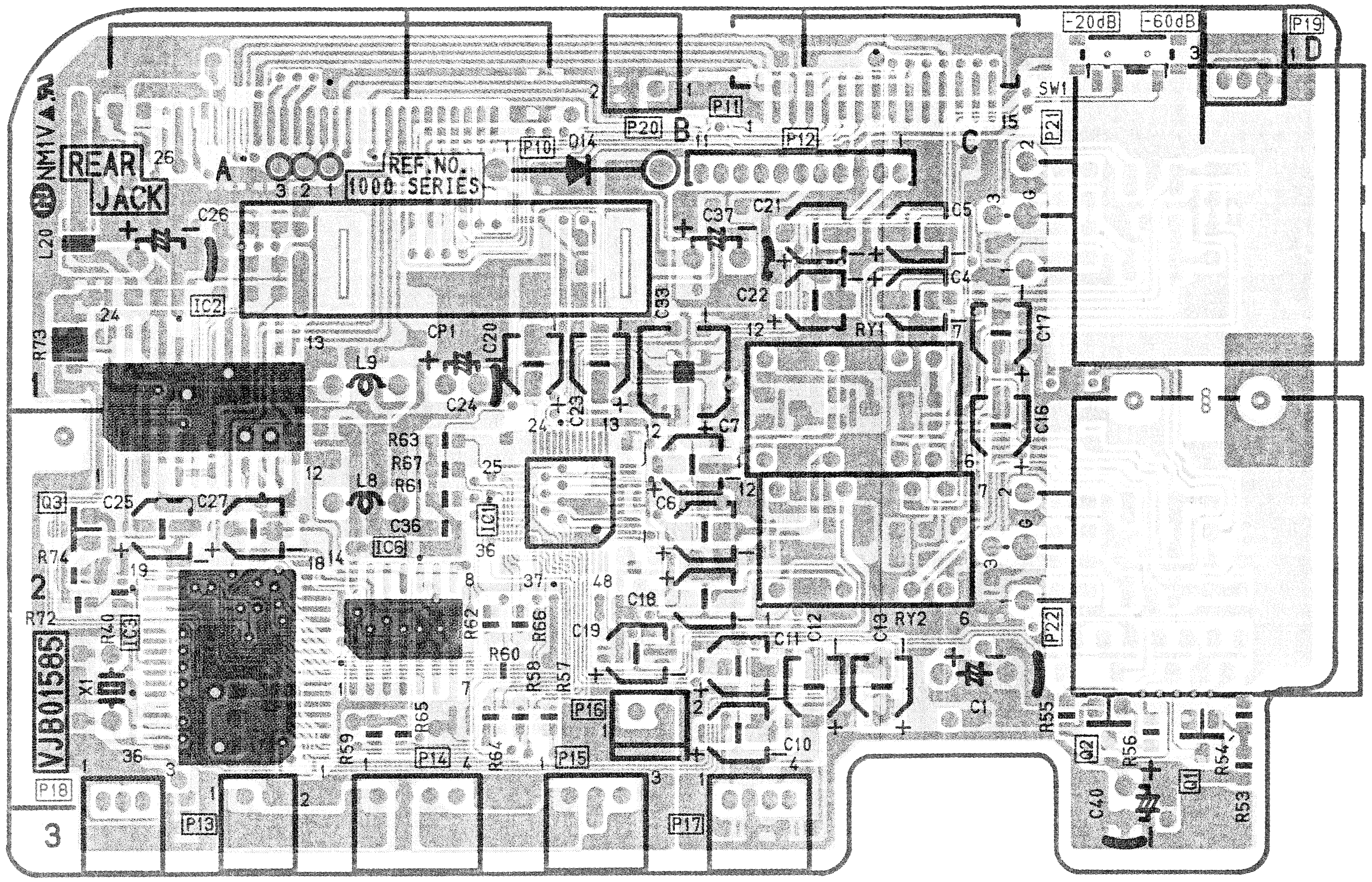

REF.NO.1000 SERIES
BREAKER 4A
REAR JACK
VEP01485
-60dB
-20dB
SW1
P19
P20
P12
RY1
RY2
IC4
IC5
Q4
D
G
S
A
B
C
1
2
3

(FOIL SIDE)


REAR JACK
REF.NO. 1000 SERIES
VJB01585
NM1V
IC1
IC2
IC6
P13
P14
P15
P16
P17
P18
P20
RY1
RY2
A
B
2
3


SERIES
R31
R32
A
R44
R45
C26
C39
R43
R47
R52
R51
D9
C30
A
R41
R42
1
D11
R70
R68
R69
D12
R46
2
D10
X1
C29
IC4
R50
R49
C28
R48
P13
C34
P18
3

(FOIL SIDE)

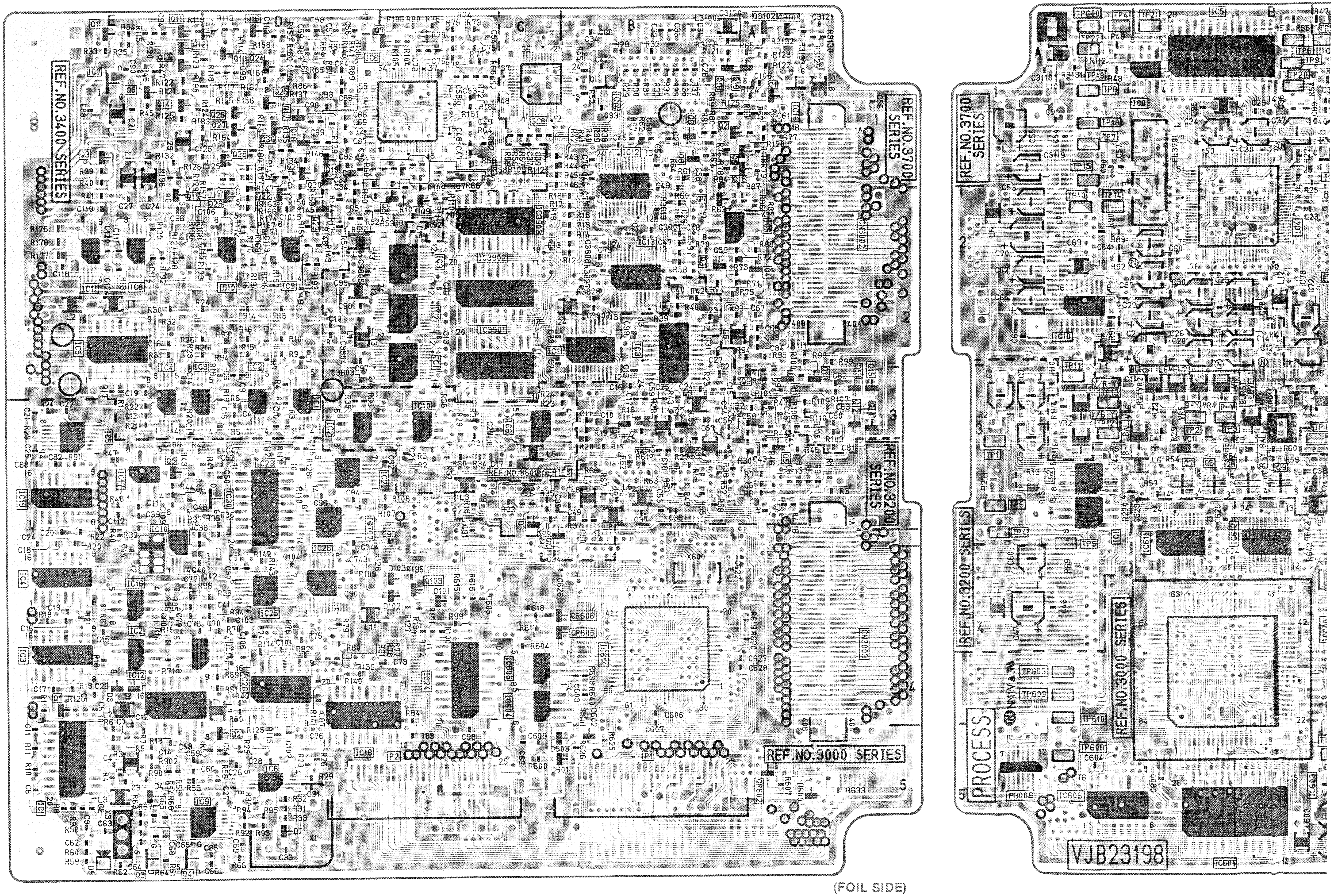

NM1V
REAR JACK
26
A
3 2 1
REF.NO. 1000 SERIES
P10
D14
P20
B
P11
P12
C
-20dB
-60dB
P19
D
SW1
P21
L20
C26
IC2
C37
C21
C5
C4
C22
C33
RY1
C17
24
R73
13
CP1
C20
L9
C24
C23
C7
C16
R63
R67
R61
L8
25
IC1
C6
Q3
C25
C27
IC6
C36
R74
2
R72
R40
IC3
X1
VJB01585
C18
C19
R62
R66
R60
R58
R57
C11
C12
C13
RY2
C1
P22
R55
R65
R59
R64
P16
P14
P15
C10
P17
P18
P13
Q2
R56
Q1
R54
R53
C40
3

(COMPONENT SIDE)

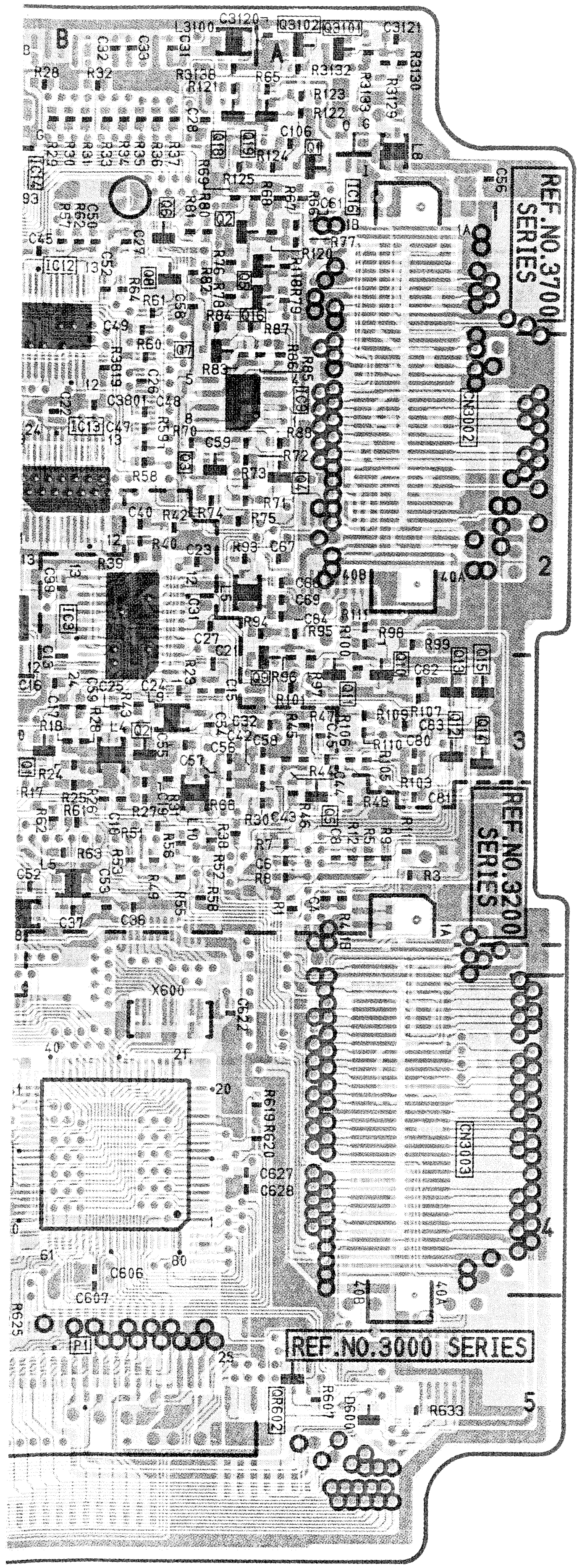
REAR JACK C.B.A.		
Transistor		
Q1001	C-2	Ⓒ
Q1002	C-2	Ⓒ
Q1003	A-2	Ⓒ
Q1004	B-1	Ⓕ
Q1005	B-1	Ⓕ
Transistor & Resistor		
QR1001	B-2	Ⓕ
QR1002	B-2	Ⓕ
QR1003	B-2	Ⓕ
QR1004	B-2	Ⓕ
QR1005	C-2	Ⓕ
QR1006	C-2	Ⓕ
QR1007	D-2	Ⓕ
QR1008	C-2	Ⓕ
Integrated Circuit		
IC1001	B-2	Ⓒ
IC1002	A-1	Ⓒ
IC1003	A-2	Ⓒ
IC1004	A-2	Ⓕ
IC1005	A-2	Ⓕ
IC1006	A-2	Ⓒ
Connector		
P1010	B-1	Ⓒ
P1011	B-1	Ⓒ
P1012	B-1	Ⓕ
P1012	B-1	Ⓒ
P1013	A-3	Ⓕ
P1013	A-3	Ⓒ
P1014	B-2	Ⓕ
P1014	B-2	Ⓒ
P1015	B-3	Ⓕ
P1015	B-2	Ⓒ
P1016	B-2	Ⓕ
P1016	B-2	Ⓒ
P1017	B-3	Ⓕ
P1017	B-3	Ⓒ
P1018	A-3	Ⓕ
P1018	A-3	Ⓒ
P1019	D-1	Ⓕ
P1019	D-1	Ⓒ
P1020	B-1	Ⓕ
P1020	B-1	Ⓒ
P1021	C-1	Ⓕ
P1022	C-2	Ⓒ

ADDRESS INFORMATION
Ⓕ...FOIL SIDE
Ⓒ...COMPONENT SIDE

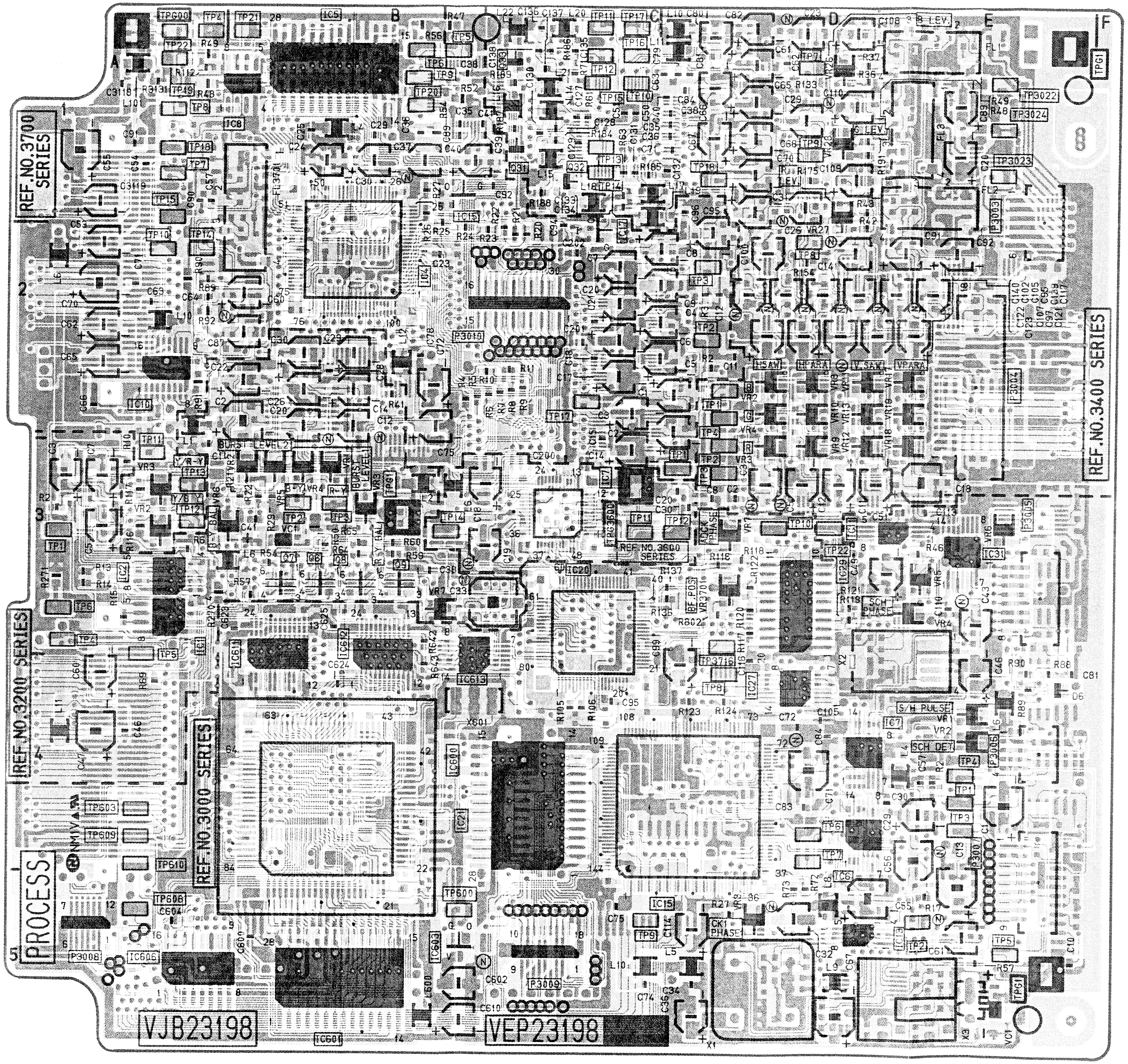
PROCESS C.B.A. (E15)


REF.NO.3400 SERIES
REF.NO.3700 SERIES
REF.NO.3600 SERIES
REF.NO.3200 SERIES
REF.NO.3000 SERIES
PROCESS
VJB23198

(FOIL SIDE)


REF.NO.3700 SERIES
REF.NO.3200 SERIES
REF.NO.3000 SERIES

(FOIL SIDE)


REF.NO.3700 SERIES
REF.NO.3400 SERIES
REF.NO.3600 SERIES
REF.NO.3200 SERIES
REF.NO.3000 SERIES
PROCESS
VJB23198
VEP23198

(FOIL SIDE)

PROCESS C.B.A.

Transistor		
Q3001	E-4	Ⓕ
Q3002	D-5	Ⓕ
Q3003	E-5	Ⓕ
Q3004	E-5	Ⓕ
Q3005	E-3	Ⓕ
Q3103	C-4	Ⓕ
Q3201	B-3	Ⓕ
Q3202	B-3	Ⓕ
Q3203	C-3	Ⓕ
Q3204	C-3	Ⓕ
Q3205	A-3	Ⓕ
Q3206	B-3	Ⓒ
Q3207	B-3	Ⓒ
Q3208	B-3	Ⓒ
Q3209	B-3	Ⓒ
Q3401	E-1	Ⓕ
Q3403	E-1	Ⓕ
Q3405	E-1	Ⓕ
Q3407	C-1	Ⓕ
Q3408	C-2	Ⓕ
Q3409	C-2	Ⓕ
Q3410	D-1	Ⓕ
Q3411	E-1	Ⓕ
Q3412	E-1	Ⓕ
Q3414	E-1	Ⓕ
Q3416	D-1	Ⓕ
Q3417	D-1	Ⓕ
Q3418	D-1	Ⓕ
Q3419	D-1	Ⓕ
Q3421	D-1	Ⓕ
Q3423	D-2	Ⓕ
Q3424	D-1	Ⓕ
Q3425	D-1	Ⓕ
Q3426	D-1	Ⓕ
Q3428	D-1	Ⓕ
Q3430	D-1	Ⓕ
Q3431	C-1	Ⓒ
Q3432	C-1	Ⓒ
Q3433	C-1	Ⓒ
Q3701	A-1	Ⓕ
Q3702	B-1	Ⓕ
Q3703	B-2	Ⓕ
Q3704	A-2	Ⓕ
Q3705	A-1	Ⓕ
Q3706	B-1	Ⓕ
Q3707	B-2	Ⓕ
Q3708	B-1	Ⓕ
Q3709	A-3	Ⓕ
Q3710	A-3	Ⓕ
Q3711	A-3	Ⓕ
Q3712	A-3	Ⓕ
Q3713	A-3	Ⓕ
Q3714	A-3	Ⓕ
Q3715	A-3	Ⓕ
Q3716	A-1	Ⓕ
Q3718	B-1	Ⓕ
Q3719	A-1	Ⓕ

Transistor & Resistor		
QR3602	A-5	Ⓕ
QR3605	C-4	Ⓕ
QR3606	C-4	Ⓕ

Integrated Circuit		
IC3001	E-5	Ⓕ
IC3002	E-4	Ⓕ
IC3003	E-4	Ⓕ
IC3004	E-4	Ⓕ
IC3005	E-3	Ⓕ
IC3006	D-4	Ⓒ
IC3007	D-4	Ⓒ
IC3008	D-5	Ⓕ
IC3009	E-5	Ⓕ
IC3010	E-3	Ⓕ
IC3011	E-3	Ⓒ
IC3012	E-4	Ⓕ
IC3013	D-5	Ⓒ
IC3014	E-4	Ⓕ
IC3015	D-5	Ⓒ
IC3016	E-4	Ⓕ
IC3017	E-3	Ⓕ
IC3018	D-4	Ⓕ
IC3019	E-3	Ⓕ
IC3020	C-3	Ⓒ
IC3022	D-3	Ⓕ
IC3023	D-3	Ⓕ
IC3024	C-4	Ⓕ
IC3025	D-4	Ⓕ
IC3028	D-4	Ⓕ
IC3029	D-3	Ⓒ
IC3030	D-3	Ⓕ
IC3031	E-3	Ⓒ
IC3201	A-3	Ⓒ
IC3202	A-3	Ⓒ
IC3203	B-2	Ⓕ
IC3401	D-3	Ⓕ
IC3402	D-3	Ⓕ
IC3405	E-2	Ⓕ
IC3406	D-1	Ⓕ
IC3407	E-1	Ⓕ
IC3600	C-4	Ⓒ
IC3601	B-5	Ⓒ
IC3602	D-3	Ⓕ
IC3603	C-5	Ⓒ
IC3604	C-4	Ⓕ
IC3605	C-4	Ⓕ
IC3606	A-5	Ⓒ
IC3607	C-3	Ⓒ
IC3608	C-3	Ⓕ
IC3610	C-3	Ⓕ
IC3611	B-3	Ⓒ
IC3612	B-3	Ⓒ
IC3613	C-3	Ⓒ
IC3701	C-2	Ⓕ
IC3702	C-2	Ⓕ
IC3703	C-2	Ⓕ
IC3704	B-2	Ⓒ
IC3705	B-1	Ⓒ
IC3706	C-1	Ⓕ
IC3707	D-3	Ⓕ
IC3708	B-1	Ⓒ
IC3709	A-2	Ⓕ
IC3710	A-2	Ⓒ
IC3711	B-2	Ⓕ
IC3712	B-1	Ⓕ
IC3713	B-2	Ⓕ
IC3714	B-1	Ⓕ
IC3715	C-1	Ⓒ
IC3716	A-1	Ⓕ
IC3717	C-2	Ⓒ
IC3901	C-2	Ⓕ
IC3902	C-2	Ⓕ
IC3903	C-2	Ⓕ

Test Point		
TP3001	E-4	Ⓒ
TP3002	E-5	Ⓒ
TP3003	E-4	Ⓒ
TP3004	E-4	Ⓒ
TP3005	E-5	Ⓒ
TP3006	D-4	Ⓒ
TP3007	D-4	Ⓒ
TP3008	D-4	Ⓒ
TP3009	C-5	Ⓒ
TP3010	D-3	Ⓒ
TP3022	E-1	Ⓒ
TP3023	E-1	Ⓒ
TP3024	E-1	Ⓒ
TP3201	A-3	Ⓒ
TP3202	B-3	Ⓒ
TP3203	B-3	Ⓒ
TP3204	A-3	Ⓒ
TP3205	A-3	Ⓒ
TP3206	A-3	Ⓒ
TP3401	D-2	Ⓒ
TP3402	D-3	Ⓒ
TP3403	D-3	Ⓒ
TP3404	D-2	Ⓒ
TP3407	D-1	Ⓒ
TP3408	D-2	Ⓒ
TP3409	D-1	Ⓒ
TP3410	C-1	Ⓒ
TP3411	C-1	Ⓒ
TP3412	C-1	Ⓒ
TP3413	C-1	Ⓒ
TP3414	C-1	Ⓒ
TP3415	C-1	Ⓒ
TP3416	C-1	Ⓒ
TP3417	C-1	Ⓒ
TP3418	D-1	Ⓒ
TP3422	D-3	Ⓒ
TP3600	C-5	Ⓒ
TP3603	A-4	Ⓒ
TP3608	A-5	Ⓒ
TP3609	A-4	Ⓒ
TP3610	A-4	Ⓒ
TP3611	C-3	Ⓒ
TP3612	D-3	Ⓒ
TP3614	C-3	Ⓒ
TP3701	D-3	Ⓒ
TP3702	D-2	Ⓒ
TP3703	D-2	Ⓒ
TP3704	A-1	Ⓒ
TP3705	C-1	Ⓒ
TP3706	B-1	Ⓒ
TP3707	A-1	Ⓒ
TP3708	A-1	Ⓒ
TP3709	B-1	Ⓒ
TP3710	A-2	Ⓒ
TP3711	A-3	Ⓒ
TP3712	A-3	Ⓒ
TP3713	A-3	Ⓒ
TP3714	A-2	Ⓒ
TP3715	A-1	Ⓒ
TP3716	D-4	Ⓒ
TP3717	C-2	Ⓒ
TP3718	A-1	Ⓒ
TP3719	A-1	Ⓒ
TP3720	B-1	Ⓒ
TP3721	B-1	Ⓒ
TP3722	A-1	Ⓒ
TPG3001	E-5	Ⓒ
TPG3201	B-3	Ⓒ
TPG3401	E-1	Ⓒ
TPG3600	C-3	Ⓒ
TPG3700	A-1	Ⓒ

Adjustment		
VC3001	E-5	Ⓒ
VC3201	B-3	Ⓒ
VR3001	E-4	Ⓒ
VR3002	E-4	Ⓒ
VR3004	E-3	Ⓒ
VR3005	E-3	Ⓒ
VR3007	D-3	Ⓒ
VR3201	B-3	Ⓒ
VR3203	B-3	Ⓒ
VR3204	B-3	Ⓒ
VR3205	B-3	Ⓒ
VR3206	A-3	Ⓒ
VR3207	C-3	Ⓒ
VR3402	D-2	Ⓒ
VR3403	D-2	Ⓒ
VR3404	D-2	Ⓒ
VR3408	D-2	Ⓒ
VR3409	D-2	Ⓒ
VR3410	D-2	Ⓒ
VR3426	D-1	Ⓒ
VR3427	D-1	Ⓒ
VR3428	D-1	Ⓒ
VR3701	D-3	Ⓒ
VR3702	A-3	Ⓒ
VR3703	A-3	Ⓒ

Connector		
P3001	B-5	Ⓕ
P3002	C-5	Ⓕ
P3003	E-1	Ⓒ
P3004	E-2	Ⓒ
P3005	E-3	Ⓒ
P3006	E-4	Ⓒ
P3007	E-4	Ⓒ
P3008	A-5	Ⓒ
P3009	C-5	Ⓒ
P3010	C-2	Ⓒ

ADDRESS INFORMATION
Ⓕ... FOIL SIDE
Ⓒ... COMPONENT SIDE

AUDIO & SYSCON C.B.A.

Transistor		
Q4101	C-3	Ⓕ
Q4102	C-3	Ⓕ
Q4103	D-2	Ⓕ
Q4104	D-2	Ⓕ
Q4105	A-3	Ⓕ
Q4106	A-3	Ⓕ
Q4107	A-3	Ⓕ
Q4108	C-3	Ⓕ
Q4201	C-3	Ⓕ
Q4202	C-3	Ⓕ
Q4203	D-3	Ⓕ
Q4204	D-3	Ⓕ
Q4205	A-3	Ⓕ
Q4206	A-3	Ⓕ
Q4207	A-3	Ⓕ
Q4208	D-3	Ⓕ
Q4301	D-2	Ⓕ
Q4401	D-2	Ⓕ
Q4501	B-3	Ⓕ
Q4502	B-3	Ⓕ
Q4503	B-3	Ⓕ
Q4504	B-3	Ⓕ
Q4601	F-3	Ⓕ
Q4603	C-2	Ⓕ
Q4604	C-2	Ⓕ
Q4605	D-3	Ⓕ
Q4606	D-3	Ⓕ
Q4701	A-2	Ⓕ
Q6001	E-1	Ⓕ
Q6003	E-1	Ⓒ
Q6501	D-1	Ⓕ

Transistor & Resistor		
QR4101	C-2	Ⓕ
QR4102	A-2	Ⓕ
QR4103	C-2	Ⓕ
QR4201	C-2	Ⓕ
QR4202	B-3	Ⓕ
QR4203	B-2	Ⓕ
QR4501	A-3	Ⓕ
QR4502	B-3	Ⓕ
QR4503	C-3	Ⓕ
QR4504	A-3	Ⓕ
QR4505	C-2	Ⓕ
QR4506	A-3	Ⓕ
QR4507	C-2	Ⓕ
QR4508	C-2	Ⓕ
QR4510	A-2	Ⓕ
QR4511	A-2	Ⓕ
QR4512	C-3	Ⓕ
QR4513	C-3	Ⓕ
QR4601	F-3	Ⓕ
QR4603	C-2	Ⓕ
QR4604	D-3	Ⓕ
QR4605	C-2	Ⓕ
QR4606	D-3	Ⓕ
QR4607	D-3	Ⓕ
QR4701	A-2	Ⓕ
QR4702	A-2	Ⓕ
QR4703	A-2	Ⓕ
QR4704	A-2	Ⓕ
QR6001	E-1	Ⓕ
QR6002	E-1	Ⓕ
QR6003	D-1	Ⓕ
QR6501	D-1	Ⓕ
QR6502	A-1	Ⓕ
QR6503	A-1	Ⓕ
QR6504	C-1	Ⓕ
QR6505	D-1	Ⓕ
QR6512	C-1	Ⓒ
QR6513	B-1	Ⓕ
QR6514	B-1	Ⓕ
QR6515	A-1	Ⓕ
QR6516	A-1	Ⓕ
QR6517	B-1	Ⓕ

Integrated Circuit		
IC4101	B-2	Ⓒ
IC4102	B-2	Ⓕ
IC4201	B-3	Ⓒ
IC4202	B-3	Ⓕ
IC4501	D-3	Ⓒ
IC4502	C-2	Ⓕ
IC4503	C-3	Ⓕ
IC4601	E-3	Ⓕ
IC4602	D-2	Ⓒ
IC4603	E-2	Ⓕ
IC4604	E-2	Ⓒ
IC4701	A-3	Ⓕ
IC6001	E-1	Ⓒ
IC6002	E-1	Ⓒ
IC6004	E-1	Ⓕ
IC6501	C-1	Ⓕ
IC6502	C-1	Ⓒ
IC6503	C-1	Ⓒ
IC6505	C-1	Ⓒ
IC6506	D-1	Ⓒ
IC6801	B-1	Ⓕ
IC6803	A-1	Ⓕ
IC6804	B-1	Ⓕ

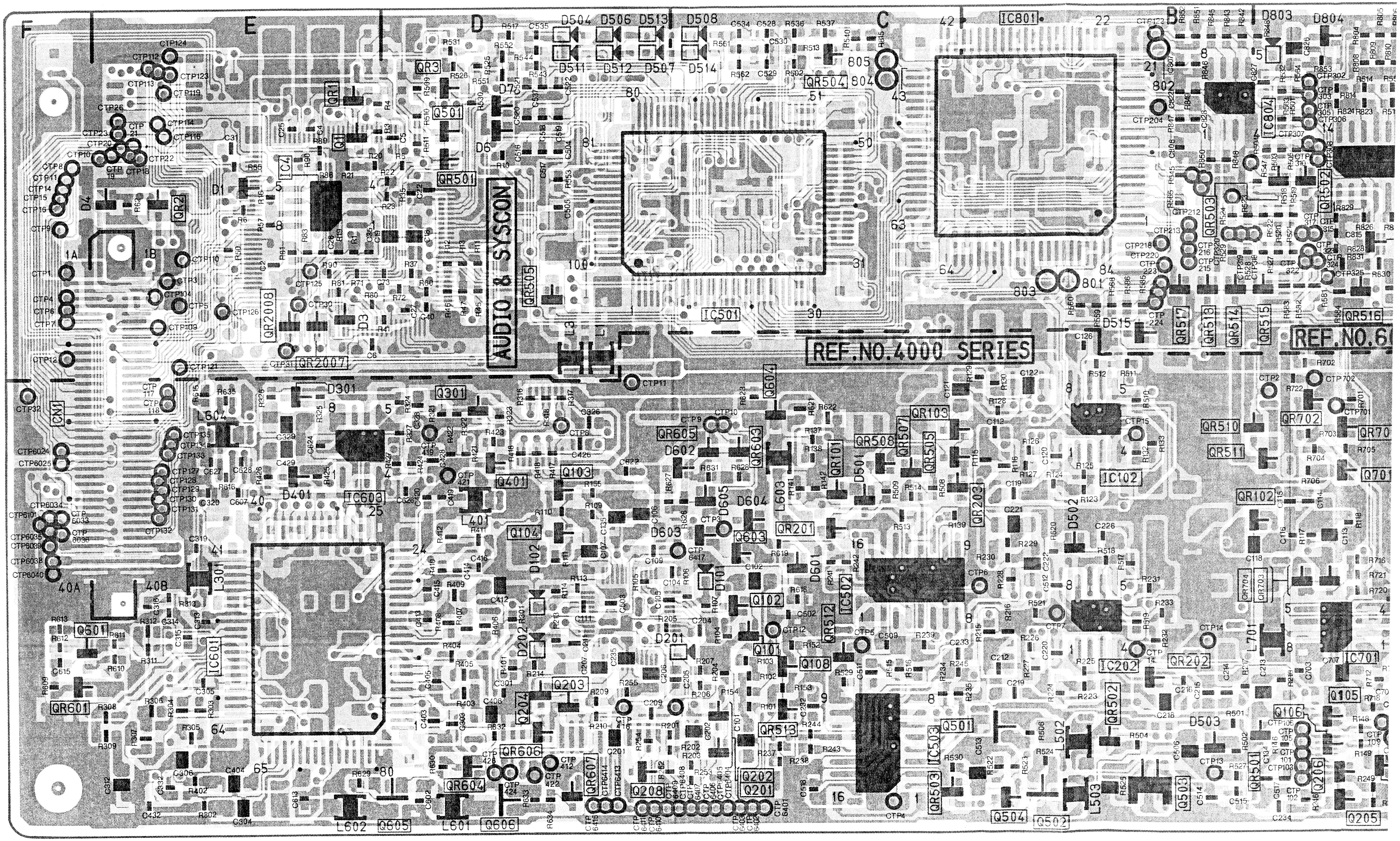
Test Point		
TP4101	A-2	Ⓒ
TP4102	A-2	Ⓒ
TP4103	B-2	Ⓒ
TP4201	B-3	Ⓒ
TP4202	B-3	Ⓒ
TP4203	B-2	Ⓒ
TP4301	D-2	Ⓒ
TP4302	E-3	Ⓒ
TP4401	D-2	Ⓒ
TP4402	E-3	Ⓒ
TP4403	E-2	Ⓒ
TP4701	A-3	Ⓒ
TP6002	C-2	Ⓒ
TP6005	C-2	Ⓒ
TP6006	D-1	Ⓒ
TP6502	C-2	Ⓒ
TP6503	C-2	Ⓒ
TPG4001	C-2	Ⓒ
TPG6001	F-1	Ⓒ

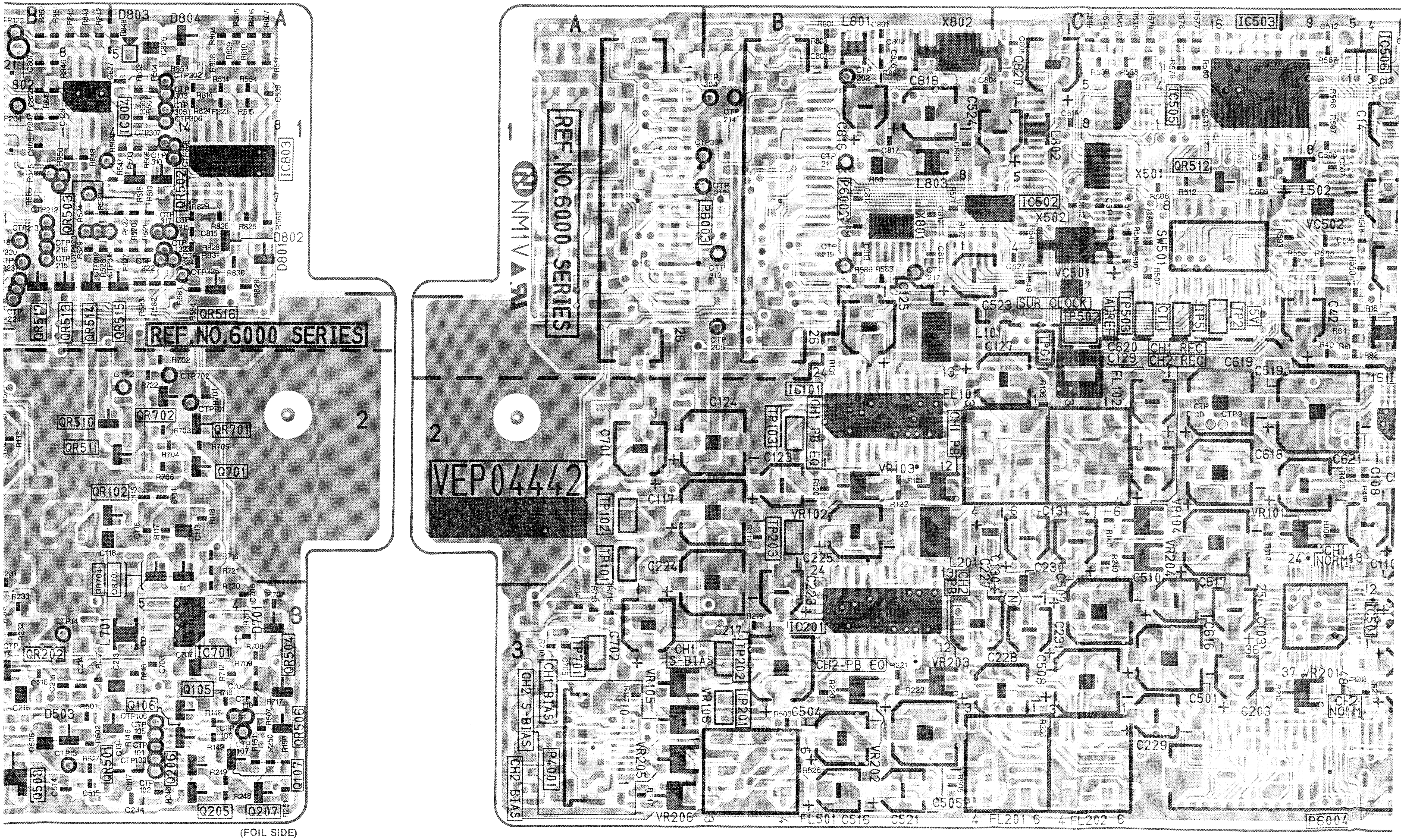
Adjustment		
VC6501	C-1	Ⓒ
VR4101	D-2	Ⓒ
VR4102	B-2	Ⓒ
VR4103	B-2	Ⓒ
VR4104	C-2	Ⓒ
VR4105	A-3	Ⓒ
VR4106	A-3	Ⓒ
VR4201	D-3	Ⓒ
VR4202	B-3	Ⓒ
VR4203	B-3	Ⓒ
VR4204	C-2	Ⓒ
VR4205	A-3	Ⓒ
VR4206	A-3	Ⓒ
VR4301	E-3	Ⓒ
VR4302	D-2	Ⓒ
VR4303	D-2	Ⓒ
VR4401	D-3	Ⓒ
VR4402	E-3	Ⓒ
VR4403	E-3	Ⓒ
VR4601	F-3	Ⓒ
VR6001	D-1	Ⓒ

Connector		
CN6001	F-2	Ⓕ
P4001	A-3	Ⓒ
P6002	B-1	Ⓒ
P6003	A-1	Ⓒ
P6004	D-3	Ⓒ

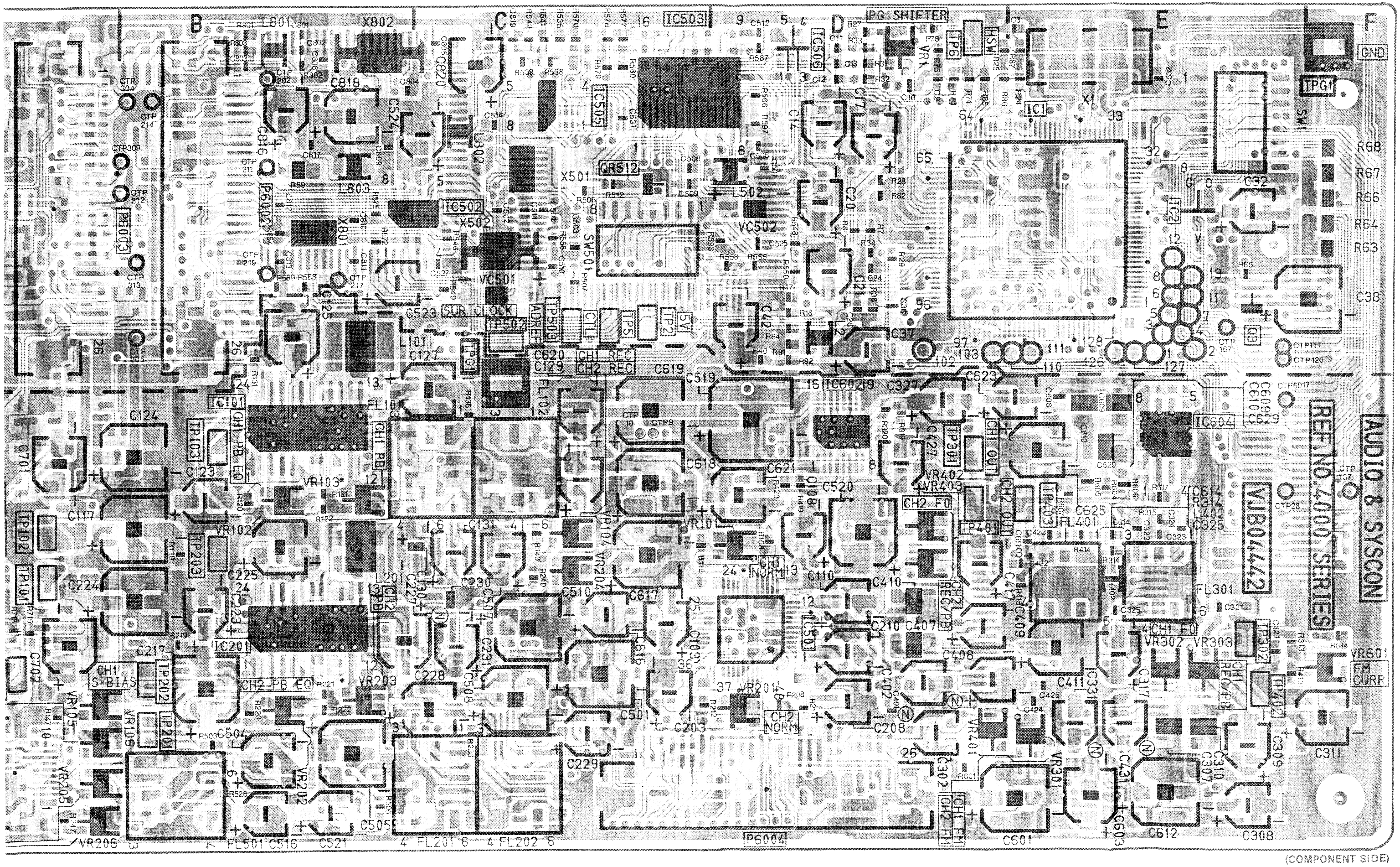
ADDRESS INFORMATION
Ⓕ... FOIL SIDE
Ⓒ... COMPONENT SIDE

AUDIO／SYSCON C.B.A.（E13）


AUDIO & SYSCON
REF.NO.4000 SERIES
REF.NO.6
IC501
IC801
IC601
IC603
IC102
IC202
IC502
IC503
IC701
IC804
IC4
CN1
F
E
D
C
B

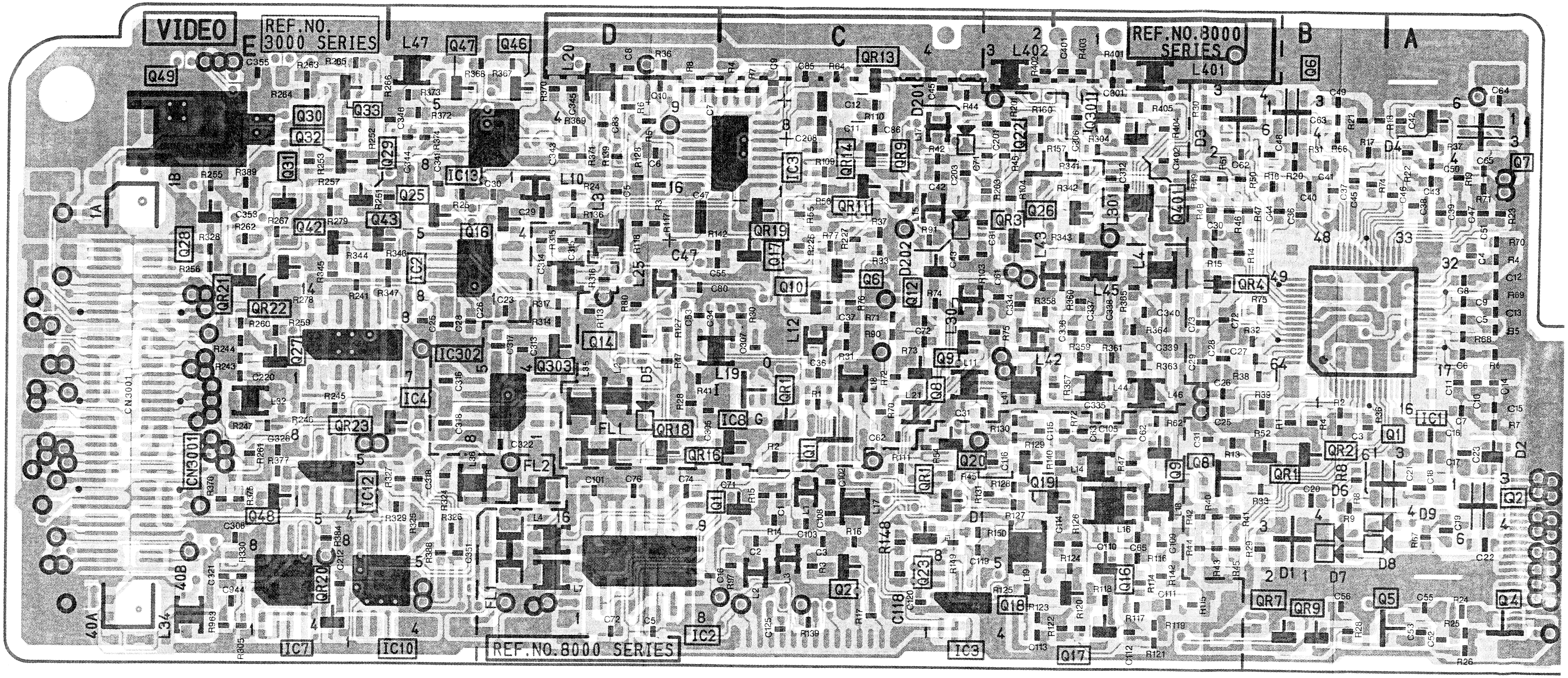

REF.NO.6000 SERIES
VEP04442
NM1V
A
B
C
1
2
3
IC101
IC201
IC501
IC502
IC503
IC505
IC506
IC701
IC803
IC804
X501
X502
X801
X802
CH1 PB EQ
CH2 PB EQ
CH1 S-BIAS
CH2 S-BIAS
CH1 BIAS
CH2 BIAS
CH1 REC
CH2 REC
CH1 NORM
CH2 NORM
SUR CLOCK
AD REF
FL101
FL102
FL201
FL202
FL501
P4001
P6002
P6003
P6004
D801
D802
D803
D804

(FOIL SIDE)

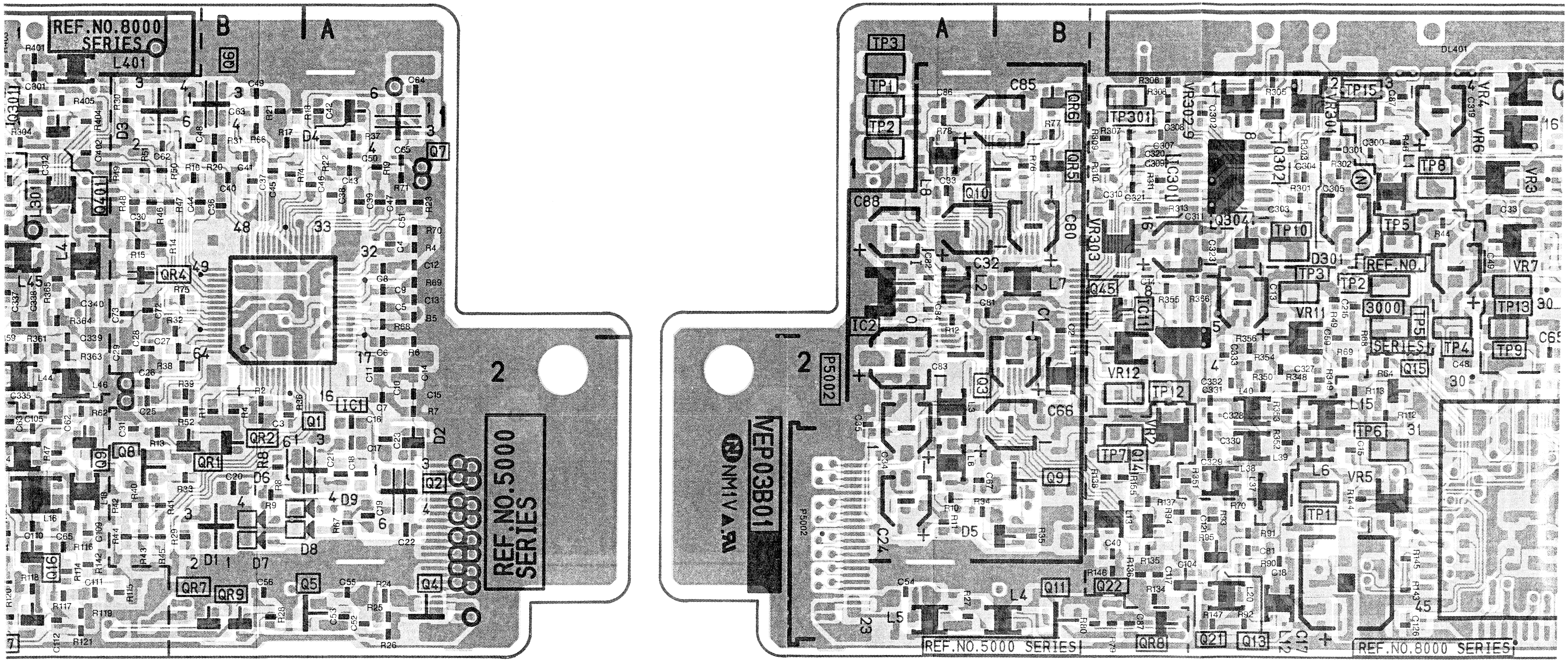

B
C
D
E
F
GND
PG SHIFTER
IC503
IC505
IC506
IC502
IC501
IC502
IC601
IC604
IC1
IC2
IC101
IC201
X802
X801
X501
X502
X1
L801
L802
L803
L101
L201
L402
L502
QR512
SW501
VC501
VC502
SUR CLOCK
ADREF
TP502
TP503
TP5
TP2
5V
CTL
TP6
HSW
TPG1
SW
P6003
P6002
P6004
CH1 REC
CH2 REC
CH1 PB EQ
CH2 PB EQ
CH1 PB
CH2 PB
CH1 NORM
CH2 NORM
CH1 OUT
CH2 OUT
CH2 FO
CH1 FO
CH1 REC/PB
CH2 REC/PB
CH1 FM
CH2 FM
CH1 S-BIAS
FM CURR
FL101
FL102
FL201
FL202
FL301
FL401
FL501
VR1
VR101
VR102
VR103
VR104
VR105
VR106
VR201
VR202
VR203
VR204
VR205
VR206
VR301
VR302
VR303
VR401
VR402
VR403
VR601
TP101
TP102
TP103
TP201
TP202
TP203
TP301
TP302
TP401
TP402
TP403
REF.NO.4000 SERIES
VJB04442
AUDIO & SYSCON

(COMPONENT SIDE)

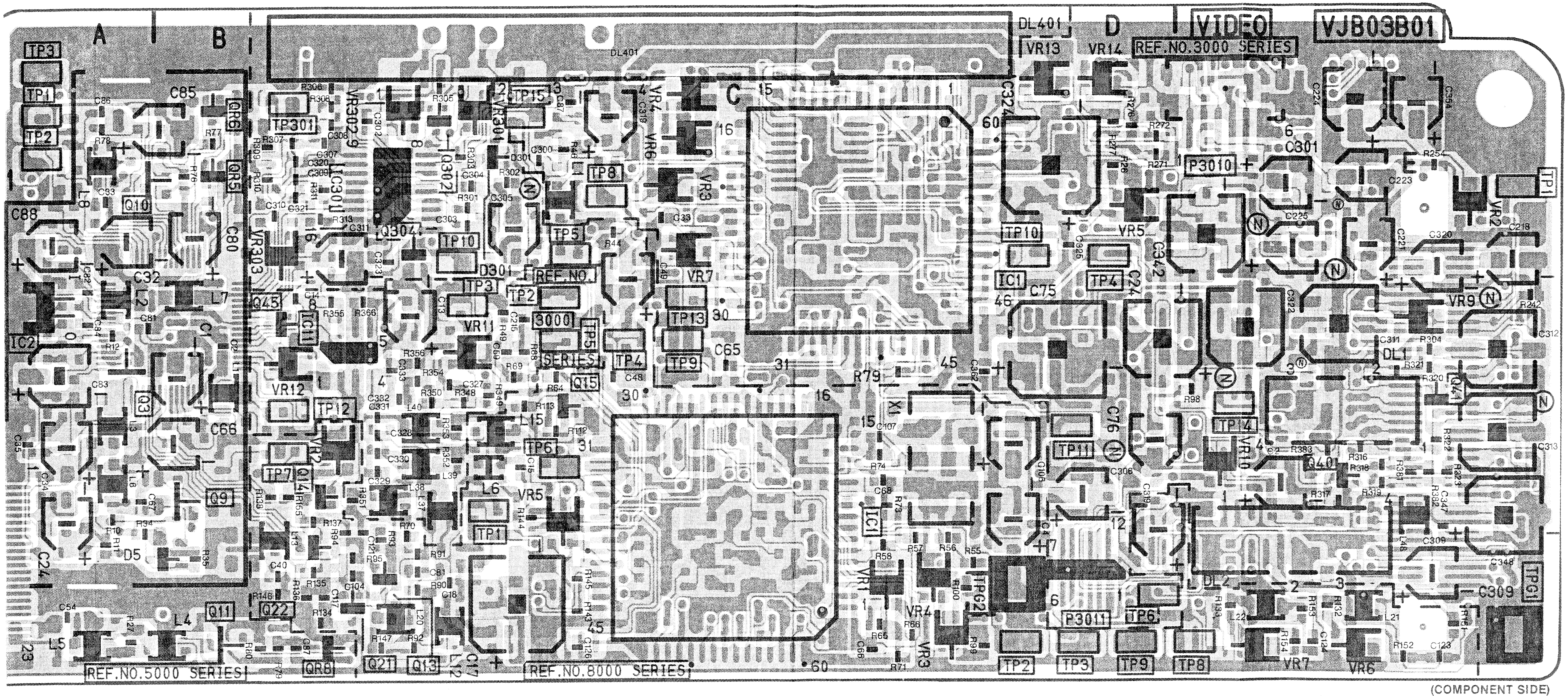
VIDEO C.B.A. (E11)


VIDEO
REF.NO.
3000 SERIES
REF.NO.8000
SERIES
REF.NO.8000 SERIES
E
D
C
B
A
CN3001
IC1
IC2
IC3
IC4
IC7
IC8
IC10
IC12
IC13
IC302
Q49
Q47
Q46
L47
L401
L402
FL1
FL2
1A
1B
40A
40B
D1
D4
D6
D7
D8
D9

(FOIL


REF.NO.8000 SERIES
L401
B
A
Q6
Q7
IC1
QR4
QR1
QR2
Q1
Q2
Q4
Q5
QR7
QR9
2
REF.NO.5000 SERIES
TP3
TP1
TP2
QR6
QR5
Q10
C88
C85
C80
C32
IC2
P5002
VEP03B01
NM1V
Q3
C66
Q9
C24
D5
L4
L5
Q11
Q22
QR8
Q21
Q13
TP301
VR302
IC301
Q302
Q304
VR304
TP15
TP10
TP8
TP5
D301
REF.NO.
3000
SERIES
TP3
TP2
TP5
TP4
TP13
TP9
Q15
VR11
VR12
TP12
TP6
TP7
Q14
VR5
TP1
VR3
VR7
DL401
REF.NO.5000 SERIES
REF.NO.8000 SERIES

(FOIL SIDE)


A
B
C
D
VIDEO
VJB03B01
REF.NO.3000 SERIES
REF.NO.5000 SERIES
REF.NO.8000 SERIES
REF.NO.
3000
SERIES
DL401
VR13
VR14
IC1
IC2
IC11
IC301
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
TP11
TP12
TP13
TP14
TP15
TP301
TPG1
TPG2
P3010
P3011
DL1
DL2
X1
Q3
Q9
Q10
Q11
Q13
Q14
Q15
Q21
Q22
Q40
Q41
Q45
Q302
Q304
QR5
QR6
QR8
VR1
VR2
VR3
VR4
VR5
VR6
VR7
VR9
VR10
VR11
VR12
VR302
VR303
VR304
C24
C32
C65
C66
C75
C76
C80
C85
C88
C301
C309
C324
C342
L2
L4
L5
L6
L7
L8
L15
D5
D301
R79

(COMPONENT SIDE)

VIDEO C.B.A.

Transistor

Q3001	C-2	Ⓕ
Q3006	C-1	Ⓕ
Q3008	C-2	Ⓕ
Q3009	C-1	Ⓕ
Q3010	C-1	Ⓕ
Q3012	C-1	Ⓕ
Q3014	D-1	Ⓕ
Q3016	D-1	Ⓕ
Q3017	C-1	Ⓕ
Q3022	C-1	Ⓕ
Q3025	D-1	Ⓕ
Q3026	B-1	Ⓕ
Q3027	E-2	Ⓕ
Q3028	E-1	Ⓕ
Q3029	E-1	Ⓕ
Q3030	E-1	Ⓕ
Q3031	E-1	Ⓕ
Q3032	E-1	Ⓕ
Q3033	E-1	Ⓕ
Q3040	E-2	Ⓒ
Q3041	E-2	Ⓒ
Q3042	E-1	Ⓕ
Q3043	E-1	Ⓕ
Q3045	B-1	Ⓒ
Q3046	D-1	Ⓕ
Q3047	D-1	Ⓕ
Q3048	E-2	Ⓕ
Q3049	E-1	Ⓕ
Q5001	A-2	Ⓕ
Q5002	A-2	Ⓕ
Q5003	A-2	Ⓒ
Q5004	A-2	Ⓕ
Q5005	A-2	Ⓕ
Q5006	B-1	Ⓕ
Q5007	A-1	Ⓕ
Q5008	B-2	Ⓕ
Q5009	B-2	Ⓒ
Q5010	A-1	Ⓒ
Q5011	B-2	Ⓒ
Q8001	C-2	Ⓕ
Q8002	C-2	Ⓕ
Q8009	B-2	Ⓕ
Q8013	B-2	Ⓒ
Q8014	B-2	Ⓒ
Q8015	C-2	Ⓒ
Q8016	B-2	Ⓕ
Q8017	B-2	Ⓕ
Q8018	C-2	Ⓕ
Q8019	B-2	Ⓕ
Q8020	C-2	Ⓕ
Q8021	B-2	Ⓒ
Q8022	B-2	Ⓒ
Q8023	C-2	Ⓕ
Q8301	B-1	Ⓕ
Q8302	B-1	Ⓒ
Q8304	B-1	Ⓒ
Q8401	B-1	Ⓕ

Transistor & Resistor

QR3001	C-2	Ⓕ
QR3003	C-1	Ⓕ
QR3009	C-1	Ⓕ
QR3013	C-1	Ⓕ
QR3014	C-1	Ⓕ
QR3016	D-2	Ⓕ
QR3018	D-2	Ⓕ
QR3019	C-1	Ⓕ
QR3020	E-2	Ⓕ
QR3021	E-1	Ⓕ
QR3022	E-1	Ⓕ
QR3023	D-2	Ⓕ
QR5001	B-2	Ⓕ
QR5002	B-2	Ⓕ
QR5004	B-1	Ⓕ
QR5005	A-1	Ⓒ
QR5006	A-1	Ⓒ
QR5007	B-2	Ⓕ
QR5008	B-2	Ⓒ
QR5009	B-2	Ⓕ

Integrated Circuit

IC3001	D-1	Ⓒ
IC3002	D-1	Ⓕ
IC3003	C-1	Ⓕ
IC3004	E-2	Ⓕ
IC3007	E-2	Ⓕ
IC3008	C-2	Ⓕ
IC3010	E-2	Ⓕ
IC3011	B-1	Ⓒ
IC3012	E-2	Ⓕ
IC3013	D-1	Ⓕ
IC5001	A-2	Ⓕ
IC8001	D-2	Ⓒ
IC8002	D-2	Ⓕ
IC8003	C-2	Ⓕ
IC8301	B-1	Ⓒ

Test Point

TP3001	E-1	Ⓒ
TP3002	C-1	Ⓒ
TP3003	B-1	Ⓒ
TP3004	D-1	Ⓒ
TP3005	C-1	Ⓒ
TP3006	D-2	Ⓒ
TP3008	E-2	Ⓒ
TP3009	C-1	Ⓒ
TP3010	D-1	Ⓒ
TP3011	D-2	Ⓒ
TP3012	B-2	Ⓒ
TP3013	C-1	Ⓒ
TP3014	E-2	Ⓒ
TP3015	C-1	Ⓒ
TP5001	A-1	Ⓒ
TP5002	A-1	Ⓒ
TP5003	A-1	Ⓒ
TP8001	B-2	Ⓒ
TP8002	D-2	Ⓒ
TP8003	D-2	Ⓒ
TP8004	C-1	Ⓒ
TP8005	C-1	Ⓒ
TP8006	C-2	Ⓒ
TP8007	B-2	Ⓒ
TP8008	C-1	Ⓒ
TP8009	D-2	Ⓒ
TP8010	B-1	Ⓒ
TP8301	B-1	Ⓒ
TPG1	E-2	Ⓒ
TPG8002	D-2	Ⓒ

Adjustment

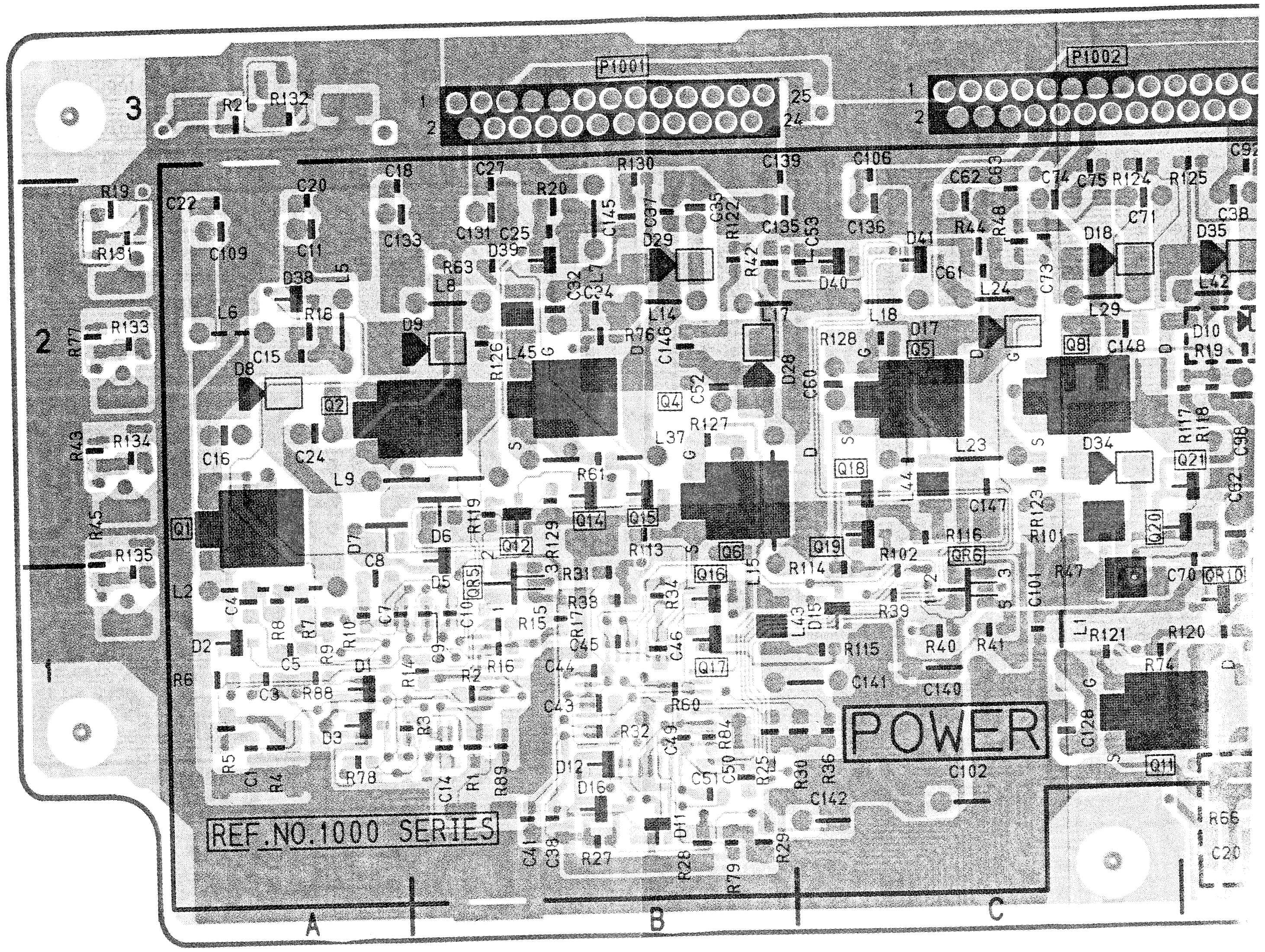
VR3002	E-1	Ⓒ
VR3003	C-1	Ⓒ
VR3004	C-1	Ⓒ
VR3005	D-1	Ⓒ
VR3006	C-1	Ⓒ
VR3007	C-1	Ⓒ
VR3009	E-1	Ⓒ
VR3010	E-2	Ⓒ
VR3011	B-1	Ⓒ
VR3012	B-2	Ⓒ
VR3013	D-1	Ⓒ
VR3014	D-1	Ⓒ
VR8002	B-2	Ⓒ
VR8003	D-2	Ⓒ
VR8004	D-2	Ⓒ
VR8006	E-2	Ⓒ
VR8007	E-2	Ⓒ
VR8301	D-2	Ⓒ
VR8302	B-1	Ⓒ
VR8303	B-1	Ⓒ

Connector

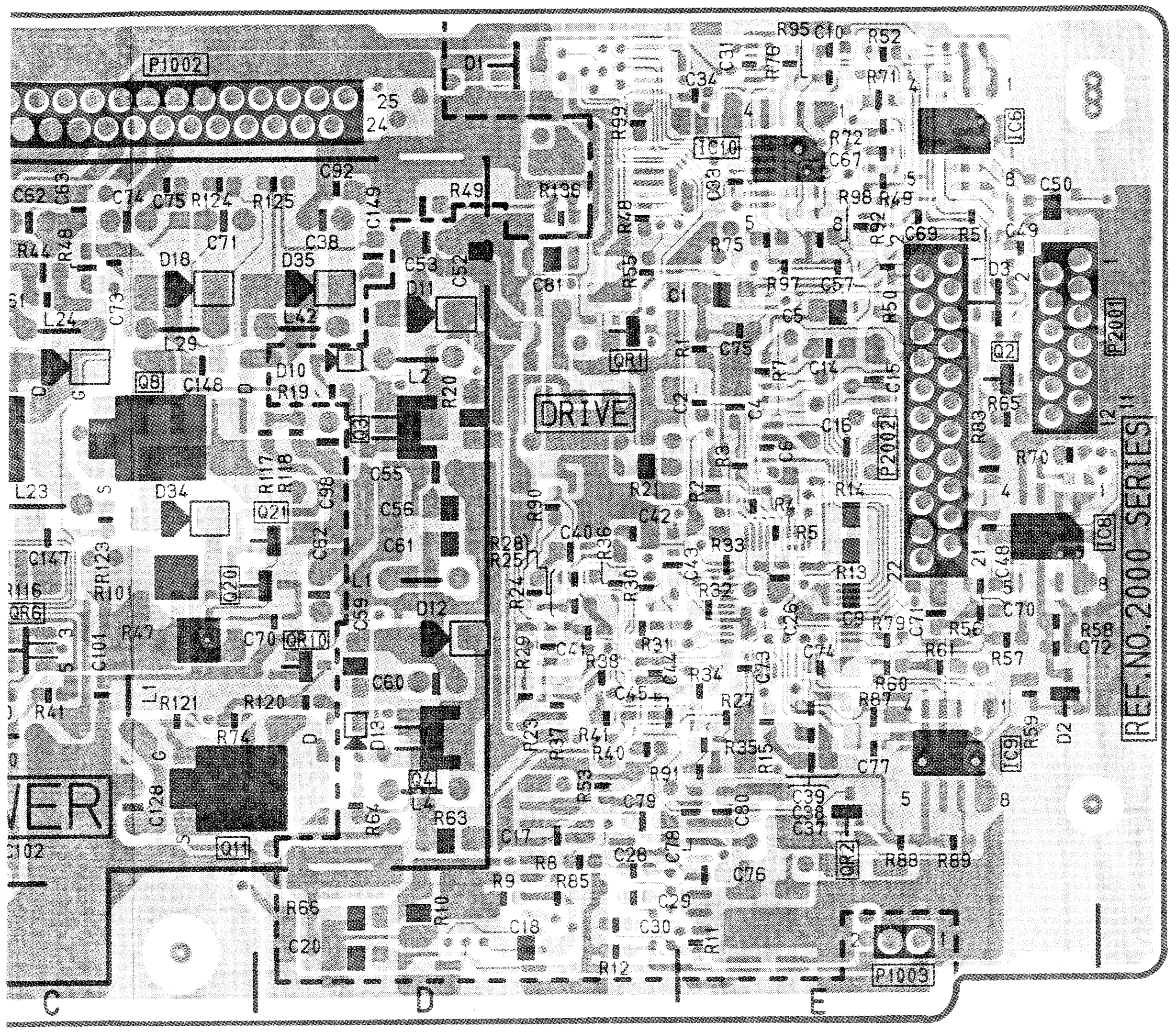
CN3001	E-2	Ⓕ
P3010	E-1	Ⓒ
P3011	D-2	Ⓒ
P5002	A-2	Ⓒ

ADDRESS INFORMATION
Ⓕ...FOIL SIDE
Ⓒ...COMPONENT SIDE

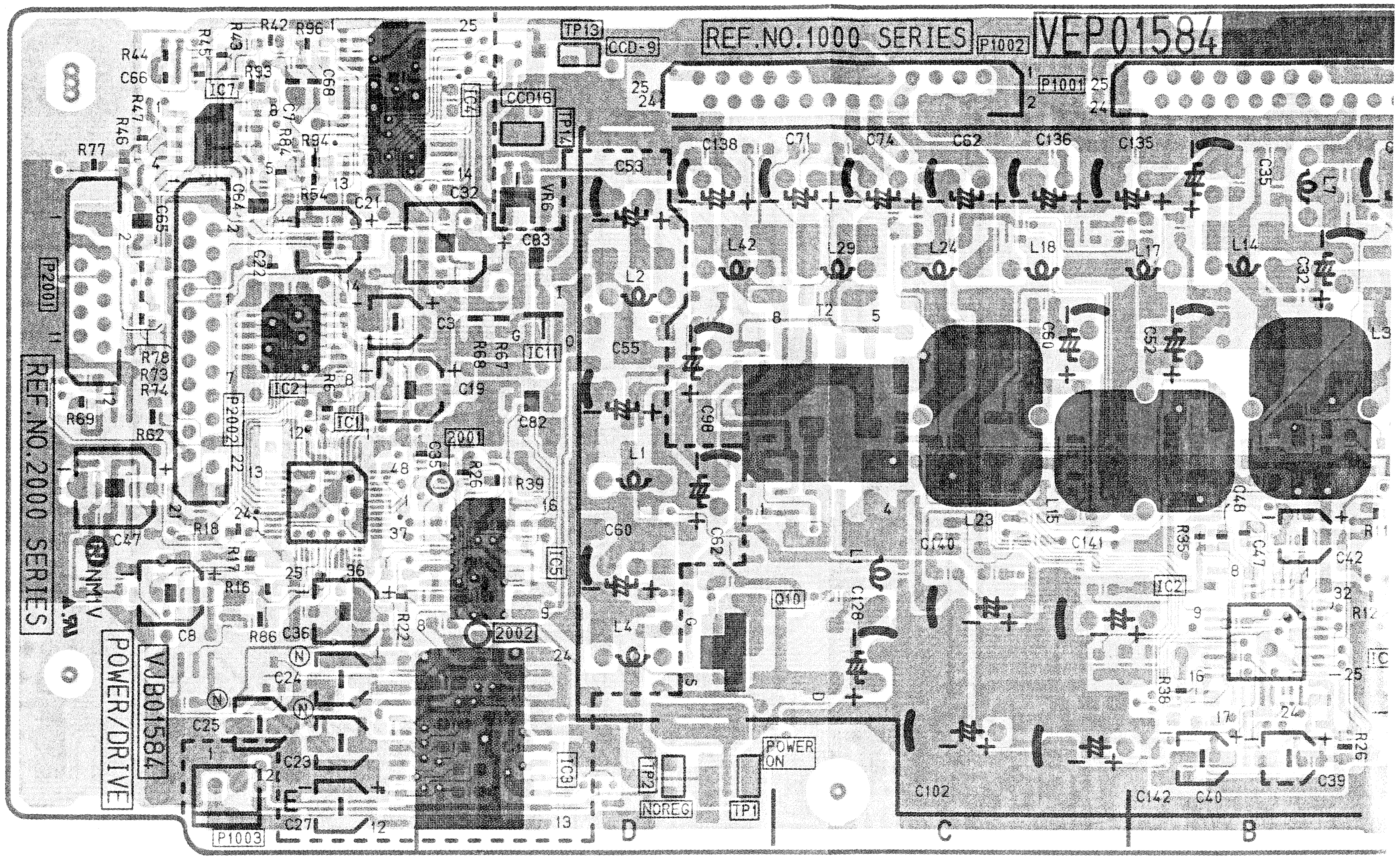
POWER C.B.A. (E10)

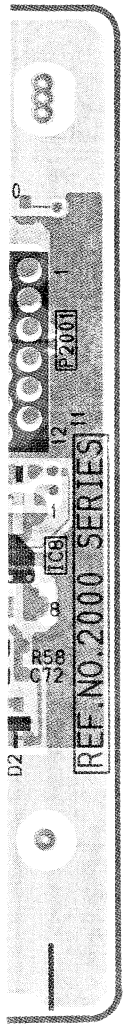


P1001
P1002
1
2
25
24
3
2
1
A
B
C
POWER
REF.NO.1000 SERIES
Q1
Q2
Q4
Q5
Q6
Q8
Q11
Q12
Q14
Q15
Q16
Q17
Q18
Q19
Q20
Q21
QR5
QR6
QR10
D2
D3
D5
D6
D7
D8
D9
D10
D12
D16
D17
D18
D28
D29
D34
D35
D38
D39
D40
D41
L2
L6
L8
L9
L14
L17
L18
L23
L24
L29
L37
L42
L43
L44
L45
C20
C22
C27
C106
C109
C133
C139
C141
C142
C147
C148
C70
C101
C102
C128
C140
R19
R20
R27
R32
R40
R41
R47
R66
R74
R77
R101
R102
R113
R114
R115
R116
R120
R121
R124
R125
R127
R128
R130
R131
R132
R133
R134
R135

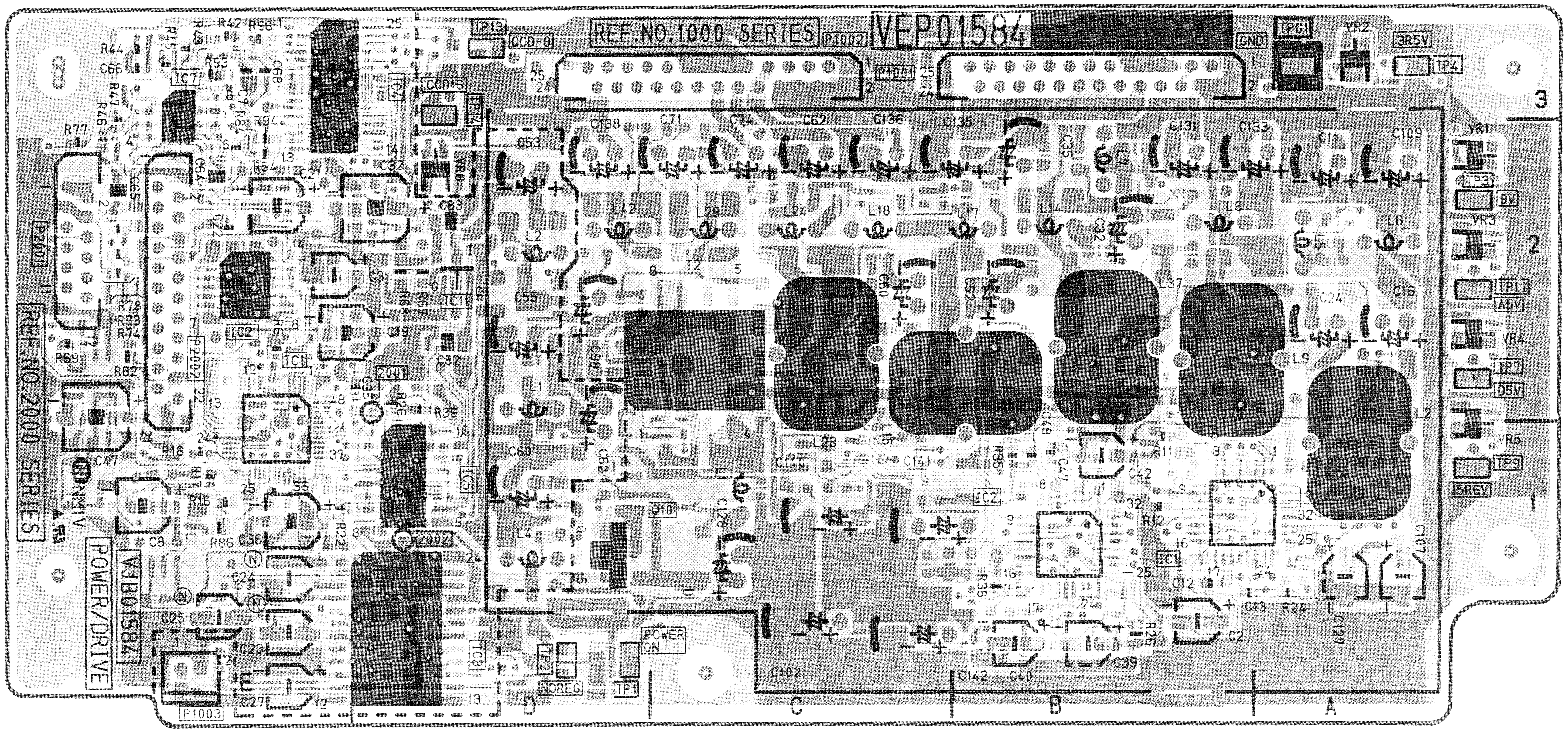

P1002
DRIVE
REF.NO.2000 SERIES
P2001
P2002
P1003
IC6
IC8
IC9
IC10
Q2
QR1
QR2
Q4
Q8
Q11
Q20
Q21
QR6
QR10
WER
C
D
E

(FOIL SIDE)


REF.NO.1000 SERIES
P1002
VEP01584
P1001
TP13
CCD-9
CCD16
TP14
REF.NO.2000 SERIES
P2001
P2002
VJB01584
POWER/DRIVE
IC1
IC2
IC3
IC4
IC5
IC7
IC11
Q10
2001
2002
P1003
TP2
NOREG
POWER ON
TP1
D
C
B


REF.NO.2000 SERIES
P2001
IC8
R58
C72
D2

SIDE)

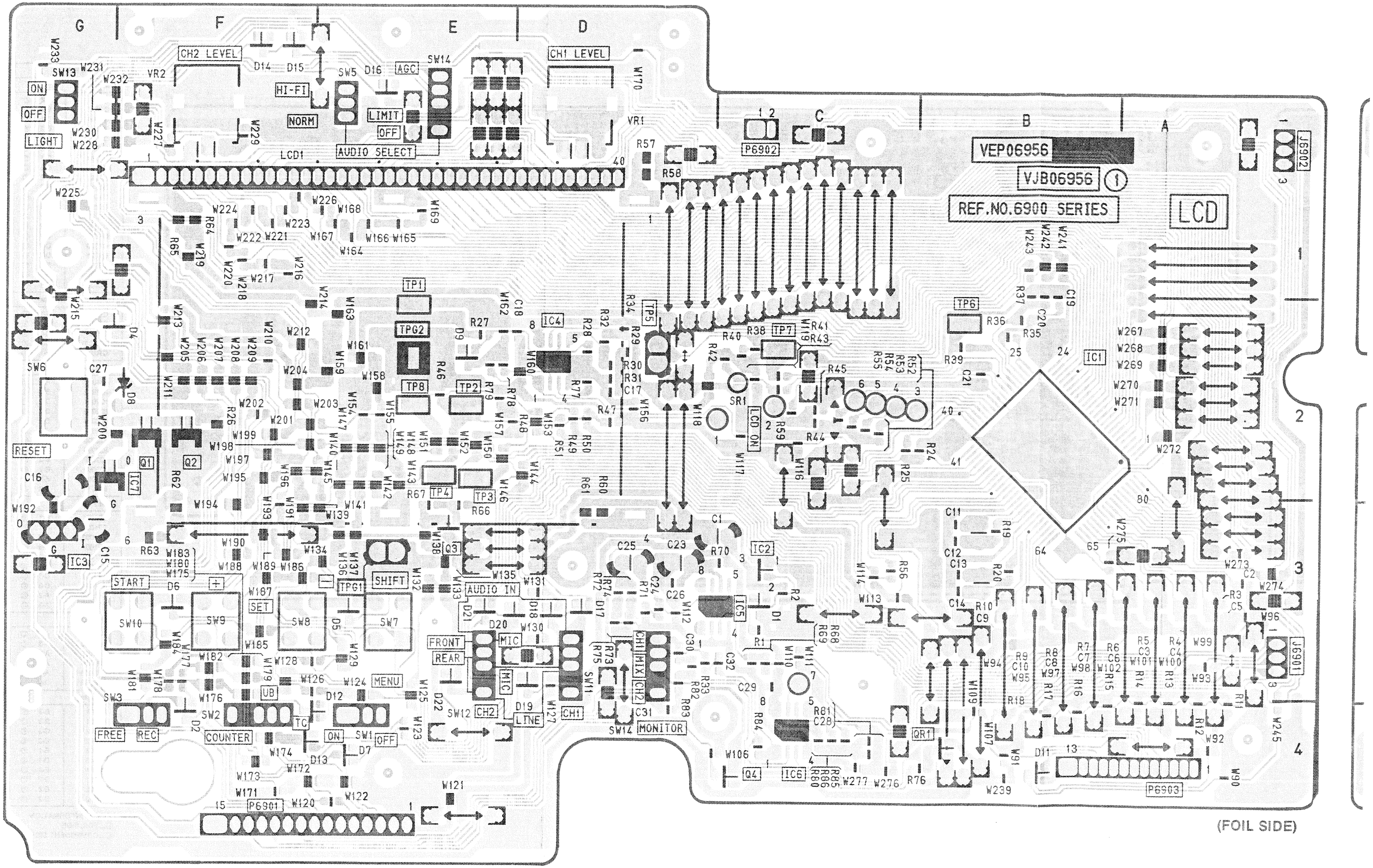

REF.NO.1000 SERIES
P1002
VEP01584
P1001
TP13
CCD-9
CCD15
TP14
GND
TPG1
VR2
3R5V
TP4
VR1
TP3
9V
VR3
TP17
A5V
VR4
TP7
D5V
VR5
TP9
5R6V
REF.NO.2000 SERIES
VJB01584
POWER/DRIVE
P2001
P2002
P1003
IC1
IC2
IC3
IC4
IC5
IC7
IC11
2001
2002
Q10
TP1
TP2
NCREG
POWER ON
T2
L1
L2
L4
L6
L7
L8
L9
L14
L17
L18
L23
L24
L29
L37
L42
C102
C142
C40
C39
C2
C13
R24
C127
C107
C109
C131
C133
C135
C136
C138
C71
C74
C62
C53
C55
C60
C98
C128
C141
C120
D
C
B
A
3
2
1

(COMPONENT SIDE)

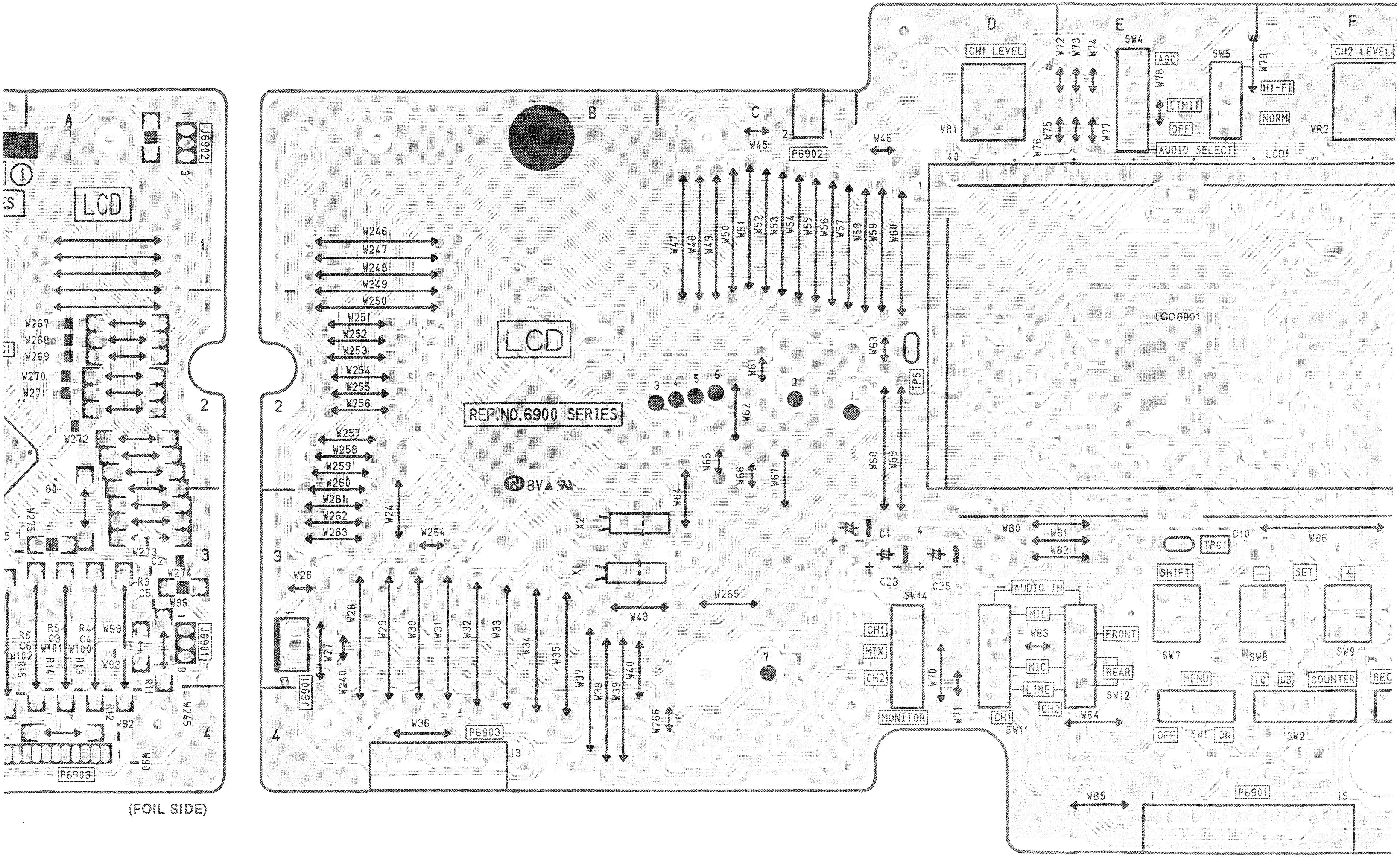
POWER C.B.A.		
Transistor		
Q1001	A-2	Ⓕ
Q1002	B-2	Ⓕ
Q1004	D-1	Ⓕ
Q1005	C-2	Ⓕ
Q1006	B-2	Ⓕ
Q1008	C-2	Ⓕ
Q1010	D-1	Ⓒ
Q1011	C-1	Ⓕ
Q1012	B-2	Ⓕ
Q1014	B-2	Ⓕ
Q1015	B-2	Ⓕ
Q1016	B-1	Ⓕ
Q1017	B-1	Ⓕ
Q1018	C-2	Ⓕ
Q1019	C-2	Ⓕ
Q1020	C-2	Ⓕ
Q1021	D-2	Ⓕ
Q2002	E-2	Ⓕ
Q2003	D-2	Ⓕ
Q2004	D-1	Ⓕ
Transistor & Resistor		
QR1005	B-1	Ⓕ
QR1006	C-1	Ⓕ
QR1010	D-1	Ⓕ
QR2001	D-2	Ⓕ
QR2002	E-1	Ⓕ
Integrated Circuit		
IC1001	B-1	Ⓒ
IC1002	B-1	Ⓒ
IC2001	D-2	Ⓒ
IC2002	D-2	Ⓒ
IC2003	D-1	Ⓒ
IC2004	D-3	Ⓒ
IC2005	D-1	Ⓒ
IC2006	E-3	Ⓕ
IC2007	D-3	Ⓒ
IC2008	E-2	Ⓕ
IC2009	E-1	Ⓕ
IC2010	E-3	Ⓕ
Test Point		
TP1001	D-1	Ⓒ
TP1002	D-1	Ⓒ
TP1003	A-2	Ⓒ
TP1004	A-3	Ⓒ
TP1007	A-2	Ⓒ
TP1009	A-1	Ⓒ
TP1013	D-3	Ⓒ
TP1014	D-3	Ⓒ
TP1017	A-2	Ⓒ
TPG1001	A-3	Ⓒ
Adjustment		
VR1001	A-2	Ⓒ
VR1002	A-3	Ⓒ
VR1003	A-2	Ⓒ
VR1004	A-2	Ⓒ
VR1005	A-1	Ⓒ
VR1006	D-2	Ⓒ
Connector		
P1001	B-3	Ⓕ
P1001	B-3	Ⓒ
P1002	C-3	Ⓕ
P1002	C-3	Ⓒ
P1003	E-1	Ⓕ
P1003	D-1	Ⓒ
P2001	E-2	Ⓕ
P2001	D-2	Ⓒ
P2002	E-2	Ⓕ
P2002	D-2	Ⓒ

ADDRESS INFORMATION
Ⓕ...FOIL SIDE
Ⓒ...COMPONENT SIDE

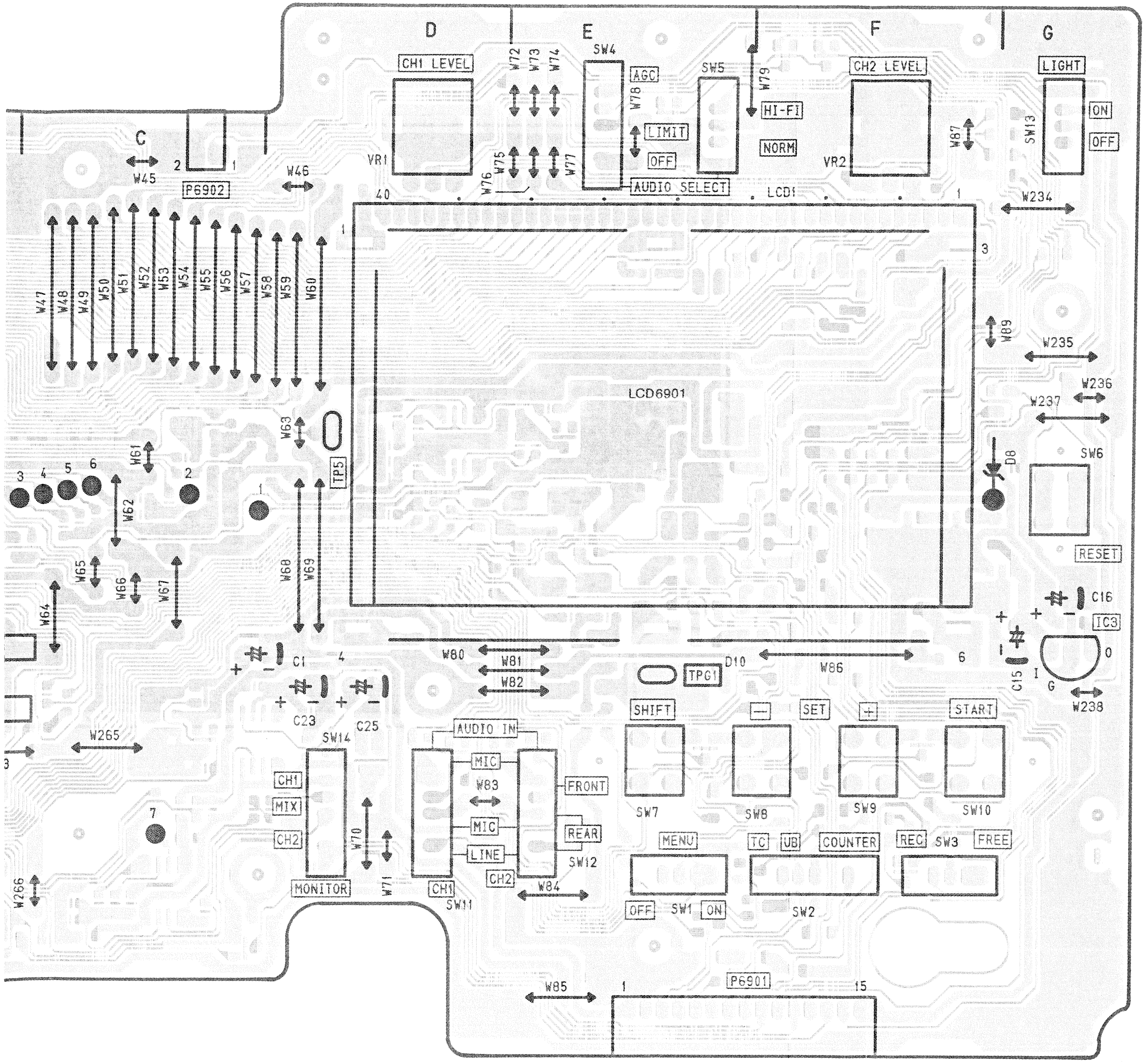
LCD C.B.A. (E30)


G
F
E
D
C
B
A
1
2
3
4
CH2 LEVEL
CH1 LEVEL
SW13
ON
OFF
LIGHT
VR2
VR1
D14
D15
D16
HI-FI
SW5
NORM
AGC
SW14
LIMIT
OFF
AUDIO SELECT
LCD1
R57
R58
P6902
VEP06956
VJB06956 ①
REF.NO.6900 SERIES
LCD
J6902
TP1
TPG2
TP8
TP2
TP4
TP3
TP5
TP6
TP7
IC4
IC1
IC2
IC3
IC5
IC6
IC7
Q1
Q2
Q3
Q4
QR1
SR1
LCD ON
SW6
RESET
C16
C15
C27
D4
D8
START
SW10
SW9
SET
SW8
SW7
SHIFT
TPG1
AUDIO IN
D5
D6
FRONT
REAR
MIC
MIC
SW11
CH1
MIX
CH2
SW12
CH2
CH1
LINE
D19
D20
D21
D18
D17
MONITOR
SW14
SW3
FREE
REC
SW2
COUNTER
UB
TC
SW1
ON
OFF
MENU
D12
D13
D7
D2
D22
P6901
P6903
J6901
D11
D1
C1
C2
C3
C4
C5
C6
C7
C8
C9
C10
C11
C12
C13
C14
C17
C18
C19
C20
C21
C23
C24
C25
C26
C28
C29
C30
C31
C32
W90
W91
W92
W93
W94
W95
W96
W97
W98
W99
W100
W101
W102
W106
W107
W109
W110
W111
W112
W113
W114
W116
W117
W118
W119
W120
W121
W122
W123
W124
W125
W126
W127
W128
W129
W130
W131
W132
W133
W134
W135
W136
W137
W138
W139
W140
W141
W142
W143
W144
W145
W146
W147
W148
W149
W150
W151
W152
W153
W154
W155
W156
W157
W158
W159
W160
W161
W162
W163
W164
W165
W166
W167
W168
W169
W170
W171
W172
W173
W174
W175
W176
W177
W178
W179
W180
W181
W182
W183
W184
W185
W186
W187
W188
W189
W190
W191
W192
W193
W194
W195
W196
W197
W198
W199
W200
W201
W202
W203
W204
W205
W206
W207
W208
W209
W210
W211
W212
W213
W214
W215
W216
W217
W218
W219
W220
W221
W222
W223
W224
W225
W226
W227
W228
W229
W230
W231
W232
W233
W239
W241
W242
W243
W245
W267
W268
W269
W270
W271
W272
W273
W274
W275
W276
W277
R1
R2
R3
R4
R5
R6
R7
R8
R9
R10
R11
R12
R13
R14
R15
R16
R17
R18
R19
R20
R24
R25
R26
R27
R28
R29
R30
R31
R32
R33
R34
R35
R36
R37
R38
R39
R40
R41
R42
R43
R44
R45
R46
R47
R48
R49
R50
R51
R52
R53
R54
R55
R56
R59
R60
R61
R62
R63
R64
R65
R66
R67
R68
R69
R70
R71
R72
R73
R74
R75
R76
R77
R78
R79
R80
R81
R82
R83
R84
R85
R86

(FOIL SIDE)


A
B
C
D
E
F
1
2
3
4
LCD
REF.NO.6900 SERIES
8V
J6902
J6901
P6902
P6903
P6901
CH1 LEVEL
CH2 LEVEL
VR1
VR2
SW4
SW5
AGC
LIMIT
OFF
AUDIO SELECT
HI-FI
NORM
LCD1
LCD6901
TP5
TPC1
D10
C1
C23
C25
X1
X2
SW14
CH1
MIX
CH2
MONITOR
AUDIO IN
MIC
LINE
FRONT
REAR
SW11
SW12
SHIFT
SET
SW7
SW8
SW9
MENU
TC
UB
COUNTER
REC
OFF
ON
SW1
SW2
W24
W26
W27
W28
W29
W30
W31
W32
W33
W34
W35
W36
W37
W38
W39
W40
W43
W45
W46
W47
W48
W49
W50
W51
W52
W53
W54
W55
W56
W57
W58
W59
W60
W61
W62
W63
W64
W65
W66
W67
W68
W69
W70
W71
W72
W73
W74
W75
W76
W77
W78
W79
W80
W81
W82
W83
W84
W85
W86
W90
W92
W93
W96
W99
W100
W101
W102
W240
W245
W246
W247
W248
W249
W250
W251
W252
W253
W254
W255
W256
W257
W258
W259
W260
W261
W262
W263
W264
W265
W266
W267
W268
W269
W270
W271
W272
W273
W274
W275
R3
R4
R5
R6
R11
R12
R13
R14
R15
C2
C3
C4
C5
C6
80
40
13
15

(FOIL SIDE)

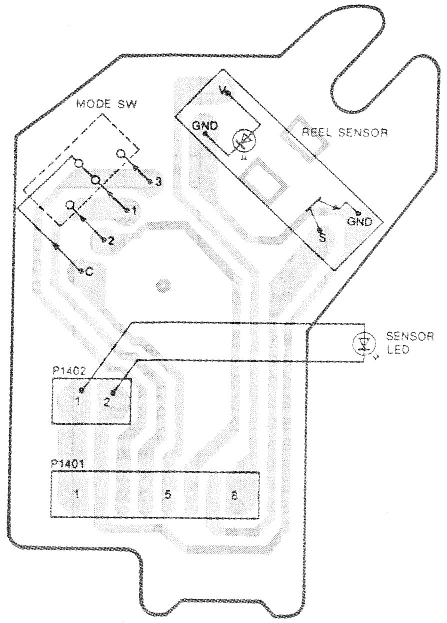

D
E
F
G
C
CH1 LEVEL
CH2 LEVEL
LIGHT
ON
OFF
SW4
SW5
SW13
AGC
LIMIT
OFF
AUDIO SELECT
HI-FI
NORM
VR1
VR2
LCD1
LCD6901
P6902
W45
W46
W47
W48
W49
W50
W51
W52
W53
W54
W55
W56
W57
W58
W59
W60
W61
W62
W63
W64
W65
W66
W67
W68
W69
W70
W71
W72
W73
W74
W75
W76
W77
W78
W79
W80
W81
W82
W83
W84
W85
W86
W87
W89
W234
W235
W236
W237
W238
W265
W266
TP5
TPG1
D8
D10
SW6
RESET
C1
C15
C16
C23
C25
IC3
SHIFT
−
SET
+
START
SW7
SW8
SW9
SW10
MENU
TC
UB
COUNTER
REC
SW3
FREE
OFF
SW1
ON
SW2
SW11
SW12
SW14
AUDIO IN
MIC
LINE
FRONT
REAR
CH1
CH2
MIX
MONITOR
P6901
1
15
40

(COMPONENT SIDE)

LCD C.B.A.		
Transistor		
Q6901	F-2	Ⓕ
Q6902	F-2	Ⓕ
Q6903	E-3	Ⓕ
Q6904	C-4	Ⓕ
Transistor & Resistor		
QR6901	B-4	Ⓕ
Integrated Circuit		
IC6901	B-2	Ⓕ
IC6902	C-3	Ⓕ
IC6903	G-3	Ⓕ
IC6903	G-3	Ⓒ
IC6904	D-2	Ⓕ
IC6905	C-3	Ⓕ
IC6906	C-4	Ⓕ
Test Point		
TP6901	E-2	Ⓕ
TP6902	E-2	Ⓕ
TP6903	E-2	Ⓕ
TP6904	E-2	Ⓕ
TP6905	D-2	Ⓕ
TP6905	D-2	Ⓒ
TP6906	B-2	Ⓕ
TP6907	C-2	Ⓕ
TP6908	E-2	Ⓕ
TPG6901	E-3	Ⓕ
TPG6901	E-3	Ⓒ
TPG6902	E-2	Ⓕ
Adjustment		
VR6901	D-1	Ⓒ
VR6902	F-1	Ⓒ
Connector		
P6901	F-4	Ⓕ
P6901	F-4	Ⓒ
P6902	C-1	Ⓕ
P6902	C-1	Ⓒ
P6903	A-4	Ⓕ
P6903	A-4	Ⓒ

ADDRESS INFORMATION
Ⓕ...FOIL SIDE
Ⓒ...COMPONENT SIDE

MECHANISM CONNECTION C.B.A. (E37)


MODE SW
REEL SENSOR
V
GND
GND
S
C
1
2
3
SENSOR LED
P1402
1
2
P1401
1
5
8

SECTION 5

EXPLODED VIEWS & REPLACEMENT PARTS LISTS

CONTENTS

SERVICING FIXTURES & TOOLS LIST ············ PRT-2
VTR MECHANISM SECTION (1) ············ PRT-2
VTR MECHANISM SECTION (2) ············ PRT-4
FRAME & CASING PARTS SECTION (1) ············ PRT-6
FRAME & CASING PARTS SECTION (2) ············ PRT-8
EVF SECTION ············ PRT-10
PACKING PARTS SECTION ············ PRT-11
ELECTRICAL REPLACEMENT PARTS LIST ············ PRT-12

SERVICING FIXTURES & TOOLS LIST

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	VFK0326	HEX WRENCH SET	1	
	VFM8080HQFP	VHS ALIGNMENT TAPE	1	
	VFK0335	RETAINING RING REMOVER	1	
	VFK0191	POST ADJUSTMENT PLATE	1	
	VFK0190	REEL TABLE HEIGHT GAUGE	1	
	VFK0328	H-POSITION ADJ. FIXTURE	1	
	VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
	VFK0157	FINE ADJUSTMENT SCREWDRIVER	1	
	VFK0133	DIAL TORQUE GAUGE	1	
	VFK0134	ADAPTOR FOR VFK0133	1	
	VFK0180	PLASTIC CLAMPER ONLY	1	
	VFK0948	CHECK LIGHT	1	
	VFK0132	BACK TENSION METER	1	
	VFK27	HEAD CLEANING STICK	1	
	MOR265	MORLYTONE GREASE	1	
	VFK0644	EVR FIXTURE	1	
	VFK0993	EXTENSION CABLE (80P)	1	
	VFK0996	EVR EXTERNSION CABLE	1	

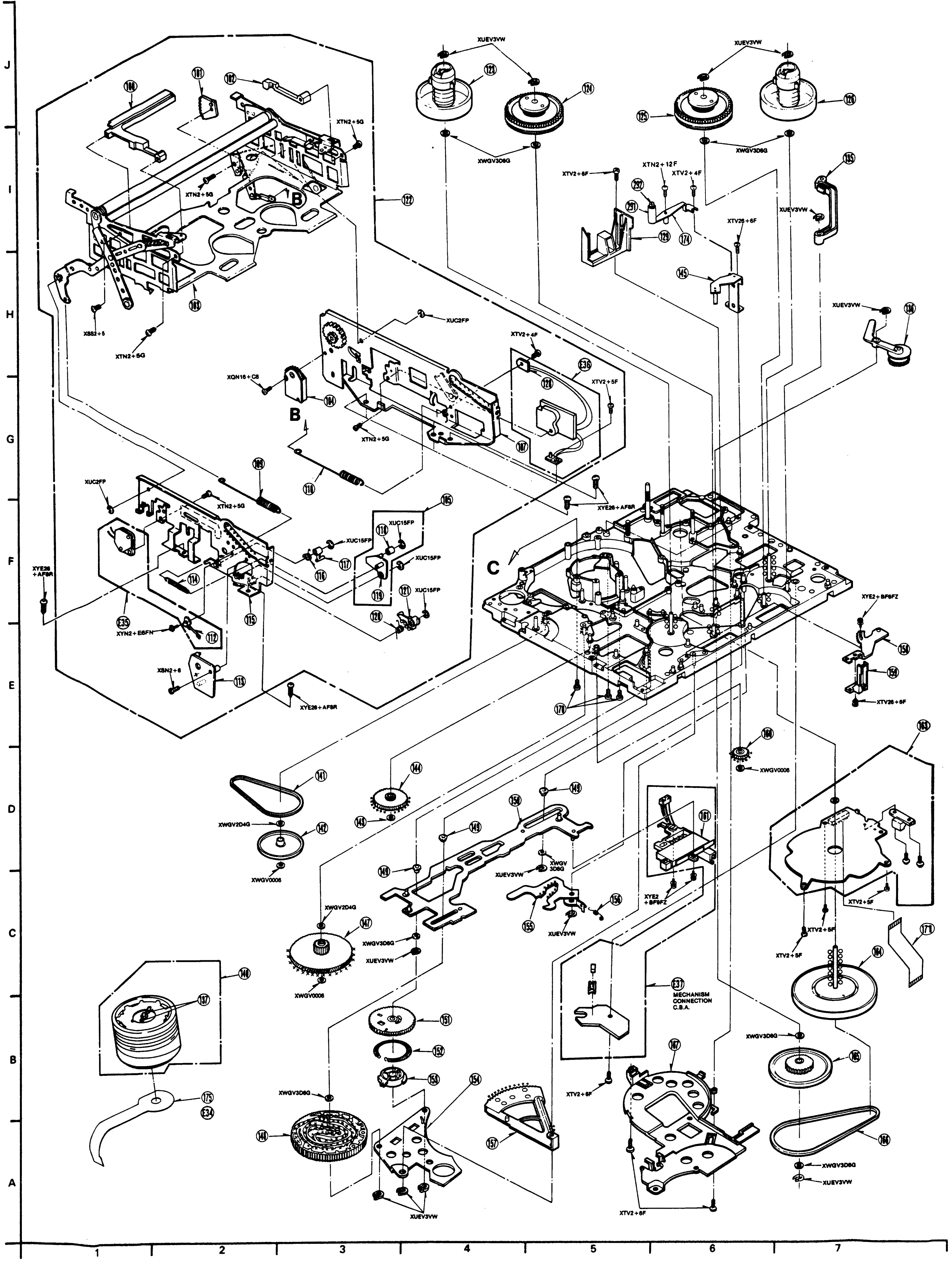
MECHANICAL REPLACEMENT PARTS LIST

1. VTR Mechanism Section (1)

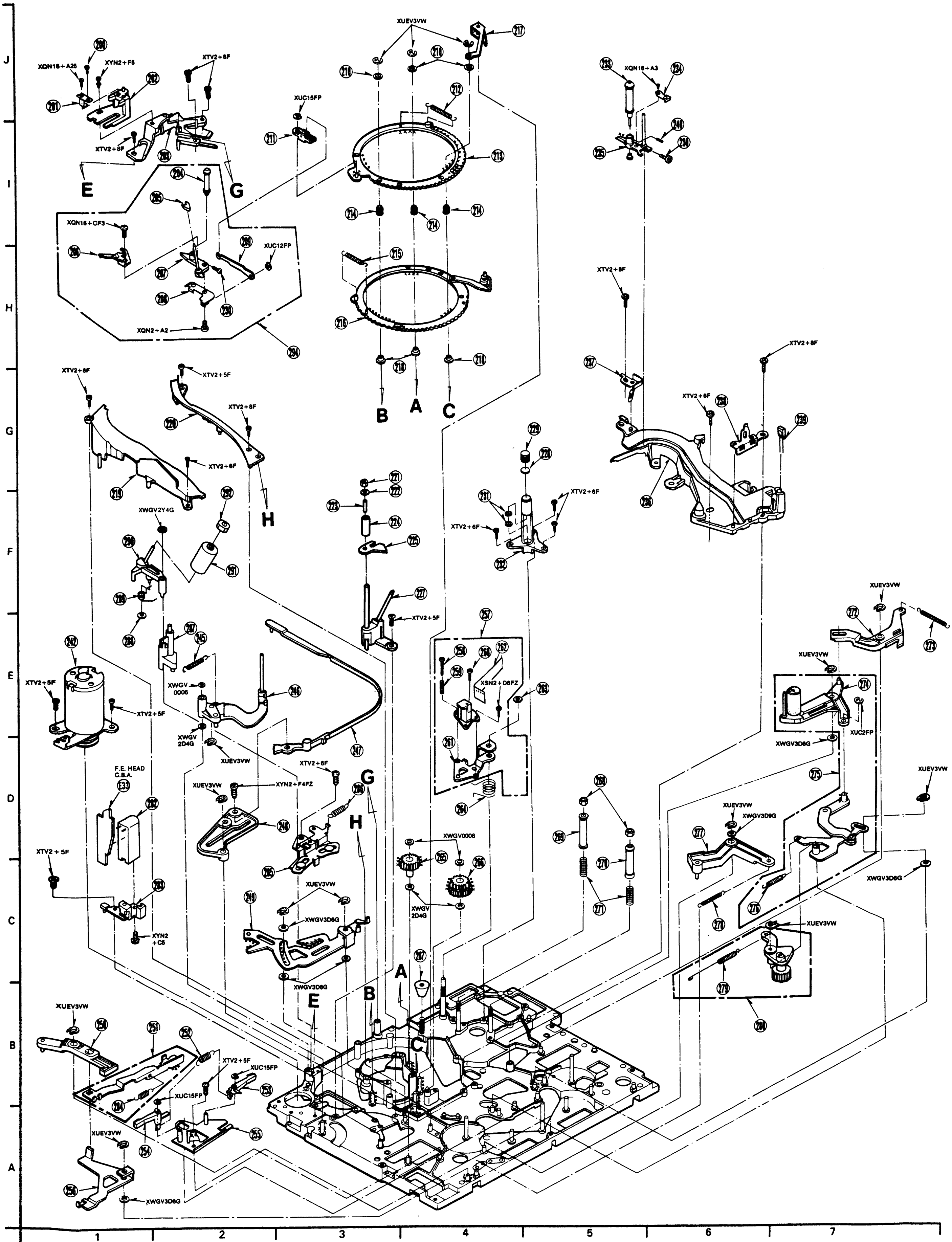
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
100	VMD0954	CASSETTE GUIDE (L)	1	
101	VDG0610	MAIN ARM GEAR (A)	1	
102	VMD0953	CASSETTE GUIDE (R)	1	
103	VXA4856	CASSETTE HOLDER UNIT	1	
104	VXP1139	DAMPER UNIT	1	
105	VXL1984	LOCK LEVER UNIT	1	
107	VXA3863	STAND (R) UNIT	1	
109	VMB1329	HOLDER SPRING (L)	1	
110	VMB1621	HOLDER SPRING (R)	1	
112	VSH0026	LEAF SW	1	
113	VMD0952	LEAF SW COVER (O)	1	
114	VMB1330	LOCK BOARD SPRING	1	
115	VXA3023	STAND (L) UNIT	1	
116	VMB1453	LOCK LEVER (B) SPRING	1	
117	VML1650	LOCK LEVER (B)	1	
118	VDP1096	LOCK ROLLER (O)	1	
119	VXL1648	LOCK BOARD UNIT	1	
120	VMB1331	LOCK LEVER (A) SPRING	1	
121	VML1649	LOCK LEVER (A)	1	
122	VXA4832	CASSETTE UP (O) UNIT	1	
123	VXR0200	SUPPLY REEL TABLE	1	
124	VXP0900B	SUPPLY CLUTCH UNIT	1	
125	VXP0901B	TAKE-UP CLUTCH UNIT	1	
126	VXR0201	TAKE-UP REEL TABLE	1	
128	VSQ0808	DEW DETECTOR UNIT	1	
129	VGQ0888	CASSETTE OPENER	1	
135	VXZ0246	SOFT BRAKE (T) UNIT	1	
136	VXP0899B	DRIVE GEAR ARM UNIT	1	
137	VHD0593	CYLINDER UNIT SCREW	2	
140	VEG1105	CYLINDER UNIT	1	
141	VDV0167	LOADING BELT	1	
142	VDG0370	INTERMEDIATE PULLEY GEAR	1	
143	VMX0653	CUT WASHER	1	
144	VDG0372	DRIVE GEAR (B)	1	
145	VXS0119	EARTH BRUSH UNIT	1	
147	VDG0371	DRIVE GEAR (A)	1	
148	VDG0202	CAM GEAR	1	
149	VMX0388	THRUST WASHER	3	
150	VXL1654	MAIN ROD (K) UNIT	1	
151	VDG0211	LOADING GEAR (C) (2)	1	
152	VMB1324	LOADING GEAR (C) SPRING	1	
153	VDG0210	LOADING GEAR (C) (1)	1	
154	VMA7228	GUARD PLATE	1	
155	VML1707	DRIVE ARMKICK LEVER	1	
156	VMB1388	DRIVE ARMKICK LEVER SPRING	1	
157	VXP0632	SECTOR GEAR UNIT	1	
158	VMA6560	SAFETY TAB SW BASE	1	
159	VSH0023	SAFETY TAB SW	1	
160	VDG0207	DRIVE GEAR (C)	1	
161	VSS0193	MODE SW	1	FOR MECHANISM CONNECTION C.B.A. (VES0689)
163	VEK5926	STATOR UNIT	1	
164	VXP1355	ROTOR UNIT	1	
165	VXP0897	MAIN PULLEY UNIT	1	
166	VDV0155	CAPSTAN BELT	1	
167	VMD0935	BELT COVER	1	
170	VHD0750	CYLINDER SCREW	3	
171	VWJ0636	CAPSTAN FPC	1	
174	VXL2381	IMPEDANCE ARM (T)	1	
175	VEP03B06A	RT-FPC	1	

EXPLODED VIEWS

❶ *VTR Mechanism Section (1)*


J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
(100)
(101)
(102)
XTN2+5G
XTN2+5G
B
(122)
(103)
XSS2+5
XTN2+5G
XUEV3VW
(123)
(124)
XWGV3D6G
XUEV3VW
(125)
(126)
XWGV3D6G
XTV2+6F
XTN2+12F
XTV2+4F
(292)
(291)
(129)
(174)
XTV26+6F
(145)
(135)
XUEV3VW
XUEV3VW
(136)
XUC2FP
XQN16+C8
(104)
B
XTN2+5G
(107)
XTV2+4F
(E36)
(128)
XTV2+5F
(110)
(109)
XUC2FP
XTN2+5G
XYE26+AF8R
(105)
XUC15FP
(118)
XUC15FP
(117)
(116)
XUC15FP
(119)
(121)
XUC15FP
(120)
C
XYE26 +AF8R
(114)
(115)
(E35)
XYN2+E6FN
(112)
XSN2+6
(113)
XYE26+AF8R
(178)
XYE2+BF6FZ
(158)
(159)
XTV26+6F
(141)
XWGV2D4G
(142)
XWGV0006
(144)
(143)
(149)
(150)
(149)
(149)
XWGV 3D6G
XUEV3VW
(155)
XUEV3VW
(156)
(160)
XWGV0006
(161)
XYE2 +BF9FZ
(163)
XTV2+5F
XTV2+5F
XTV2+5F
(171)
XWGV2D4G
(147)
XWGV3D6G
XUEV3VW
XWGV0006
(164)
(140)
(137)
(E37)
MECHANISM CONNECTION C.B.A.
(151)
(152)
(153)
(154)
XWGV3D6G
(165)
(167)
(175)
(E34)
XWGV3D6G
(148)
(157)
XTV2+6F
(166)
XWGV3D6G
XUEV3VW
XUEV3VW
XTV2+6F

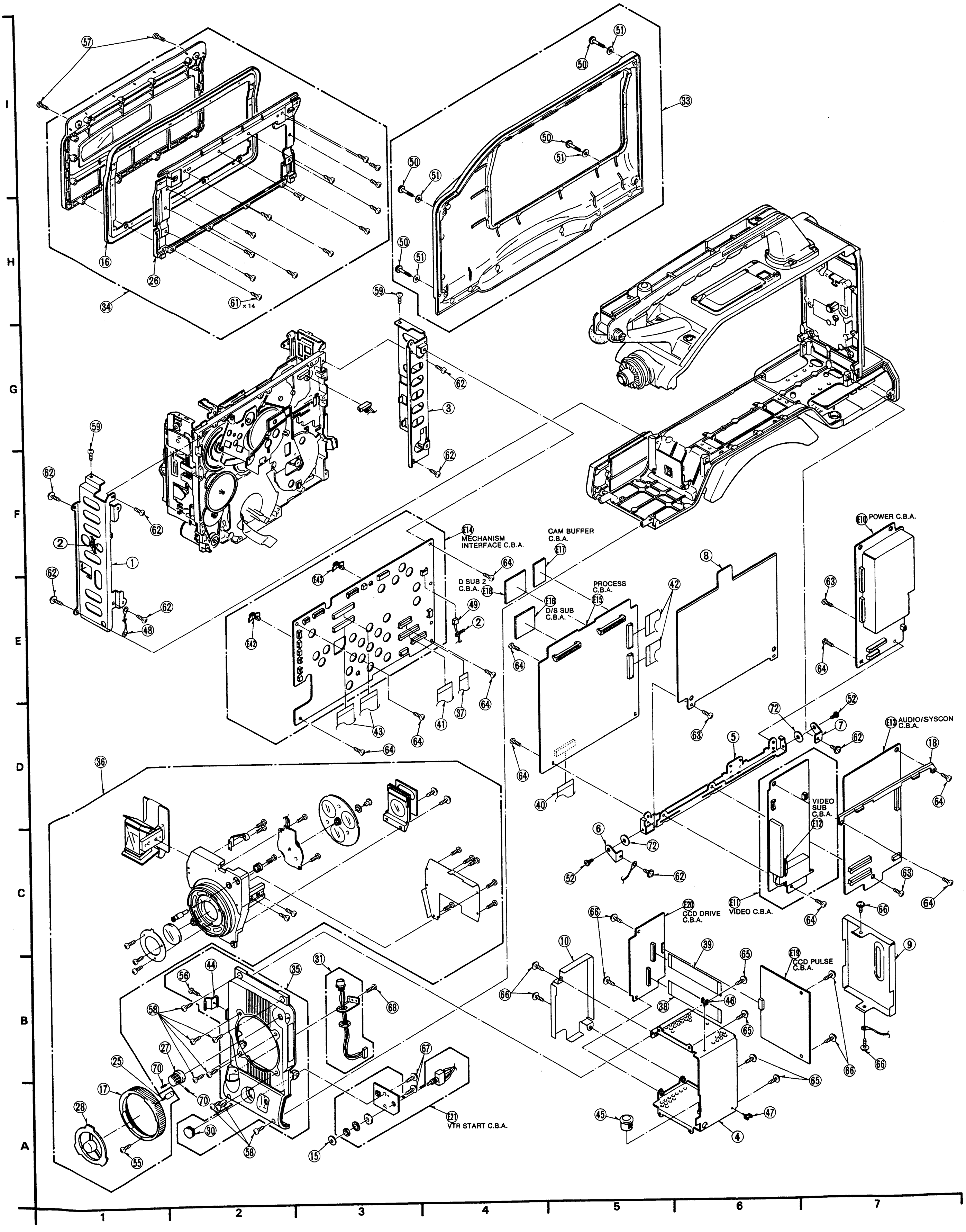
❷ VTR Mechanism Section (2)


J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
XQN16+A25
(200)
XYN2+F5
(201)
(202)
XTV2+8F
XTV2+8F
(203)
E
G
(204)
(205)
XQN16+CF3
(206)
(207)
(208)
(209)
XUC12FP
(230)
XQN2+A2
(294)
XUC15FP
(211)
XUEV3VW
(210)
(210)
(217)
(212)
(213)
(214)
(214)
(214)
(215)
(216)
(218)
(218)
B
A
C
(233)
XQN16+A3
(234)
(240)
(230)
(235)
XTV2+8F
(237)
XTV2+8F
XTV2+6F
(238)
(239)
(236)
XTV2+6F
XTV2+5F
(220)
XTV2+8F
XTV2+6F
(219)
H
(229)
(228)
(231)
XTV2+6F
XTV2+6F
(232)
(221)
(222)
(223)
(224)
(225)
(227)
XTV2+5F
XWGV2Y4G
(292)
(290)
(291)
(289)
(288)
(287)
(245)
(242)
XTV2+5F
XTV2+5F
XWGV 0006
(246)
XWGV 2D4G
XUEV3VW
(247)
(257)
(258)
(260)
(262)
(259)
XSN2+D6FZ
(263)
(261)
(264)
XUEV3VW
(272)
(273)
XUEV3VW
(274)
XUC2FP
XWGV3D6G
(275)
XUEV3VW
F.E. HEAD C.B.A.
(E33)
(282)
XTV2 + 5F
(283)
XYN2 +C5
XUEV3VW
XYN2+F4FZ
(248)
XTV2+6F
(286)
G
H
(285)
XUEV3VW
(249)
XWGV3D6G
XWGV3D6G
XWGV0006
(265)
(266)
XWGV 2D4G
(268)
(269)
(270)
(271)
XUEV3VW
XWGV3D9G
(277)
(276)
(278)
XWGV3D6G
XUEV3VW
(279)
(280)
A
(267)
B
E
C
XUEV3VW
(250)
(251)
(252)
XTV2+5F
XUC15FP
(253)
XUC15FP
(284)
(254)
(255)
XUEV3VW
(256)
XWGV3D6G

2. VTR Mechanism Section (2)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
200	VHD0282	P2 ADJUST PLATE SCREW	1	
201	VMA6542	P2 ADJUST PLATE	1	
202	VMD0701	SUPPLY POST STOPPER	1	
203	VMD1166	V STOPPER BASE	1	
204	VXP0841	SUPPLY ROLLER POST UNIT	1	
205	VGQ0842	P2 CAP	1	
206	VMD0769	TAPE PROTECTOR	1	
207	VXA2221	SUPPLY SHAFT HOLDER(1)UNIT	1	
208	VXA2256	SUPPLY SHAFT HOLDER ANGLE	1	
		UNIT	1	
209	VMM0144	CONNECTION ROD	1	
210	VMX1282	RING GUIDE SLEEVE UNIT	3	
211	VXA2231	CONNECTION TIE UNIT	1	
212	VMB1319	LOADING SPRING	1	
213	VXA2253	LOADING RING (S) (1) UNIT	1	
214	VDP1160	RING GUIDE ROLLER	3	
215	VMB1319	LOADING SPRING	1	
216	VXA3576	LOADING RING (T) (1) UNIT	1	
217	VMC0250	PRESSER SPRING	1	
218	VMX1279	RING GUIDE SLEEVE	3	
219	VMD1155	LOADING GUIDE (S) (1)	1	
220	VMD1128	LOADING GUIDE (S) (2)	1	
221	VMX1088	SUPPLY UPPER LIMITER	1	
222	VMS2888	P1 POST SLEEVE (B)	1	
223	VMX1581	P1 COLLAR	1	
224	VDP1265	P1 ROLLER	1	
225	VMA6547	P1 LIMITER PLATE	1	
227	VXA3112	P1 BASE (1) UNIT	1	
228	VXD0098	THRUST SPACER	1	
229	VHD0204	THRUST SCREW NUT	1	
230	VHD0368	ROLLER POST SCREW	2	
231	VMX0775	DUST SEAL	2	
232	VXD0108	CAPSTAN HOUSING UNIT	1	
233	VXP0927	TAKE-UP ROLLER POST UNIT	1	
234	VMA6546	TAKE-UP SHAFT HOLDER ANGLE	1	
235	VXA3116	TAKE-UP SHAFT HOLDER (A)	1	
		UNIT		
236	VMD1165	TAKE-UP LOADING BASE	1	
237	VMC0352	SHAFT HOLDER PRESSURE	1	
		SPRING		
238	VMA7226	SHAFT HOLDER PLATE ANGLE	1	
239	LN59NV	LED	1	
240	VHD0367	TAKE-UP SHAFT ADJ. SCREW	1	
242	VEM0431	LOADING MOTOR UNIT	1	<!>
245	VMB1747	TENSION SPRING	1	
246	VXL1262	TENSION ARM UNIT	1	
247	VXZ0245	TENSION BAND UNIT	1	
248	VML2065B	BAND RELEASE ARM	1	
249	VXA4828	TENSION KICK LEVER	1	
250	VML2064B	EJECT LEVER (A)	1	
251	VXA3020	SUPPORTER UNIT	1	
252	VMB1405	BRAKE SPRING	1	
253	VXZ0207B	BRAKE (R) UNIT	1	
254	VXZ0206B	BRAKE (L) UNIT	1	
255	VXA4263	BRAKE PLATE (1) UNIT	1	
256	VML2073	EJECT LEVER (B)	1	
257	VED0221	A/C HEAD UNIT	1	
258	VHD0275	A/C HEAD ADJUST SCREW	1	
259	VMB1321	A/C HEAD ADJUST SPRING	1	
260	VHD0381	A/C HEAD TILT ADJUST SCREW	1	
261	VXL2256	A/C HEAD ARM UNIT	1	
262	VWJ0608	A/C HEAD FPC	1	
263	VHN0077	A/C HEAD ARM NUT	1	
264	VMB1320	A/C HEAD SPRING	1	
265	VDG0208	LOADING GEAR (A)	1	
266	VDG0461	LOADING GEAR (B)	1	
267	VHN0197	ADJUST NUT	1	
268	VHN0047	M2 NYLON NUT	2	
269	VMS2693	P4 POST SLEEVE	1	
270	VXJ0057	P5 POST SLEEVE	1	
271	VMB1322	P4,P5 SPRING	2	
272	VML2067B	PINCH LEVER	1	
273	VMB2071	PINCH LEVER SPRING	1	
274	VXL1652	PINCH ROLLER ARM (1) UNIT	1	
275	VXL1650	PINCH ARM UNIT	1	
276	VMB1326	PINCH ARM SPRING	1	
277	VXL1264B	SOFT BRAKE LEVER (S) UNIT	1	
278	VMB1314	SOFT BRAKE SPRING (S)	1	
279	VMB1771	REW ARM SPRING	1	
280	VXL1649B	FF/REW ARM UNIT	1	
282	VBS0021	FE HEAD	1	
283	VMD1129	FE HEAD BASE	1	
284	VMB1447	SUPPORTER SPRING	1	
285	VXA3579	SLIDE BASE (0) UNIT	1	
286	VMB1965	SLIDE SPRING	1	
287	VML2285	IMPEDANCE LEVER	1	
288	VHN0109	PUSH NUT	1	
289	VMB1964	IMPEDANCE DRIVE SPRING	1	
290	VXL1879	IMPEDANCE ARM (1) UNIT	1	
291	VDP1285	IMPEDANCE ROLLER	1	
292	VMX1088	SUPPLY UPPER LIMITER	1	
294	VXA2220	SUPPLY SHAFT HOLDER UNIT	1	

❸ Frame & Casing Parts Section (1)

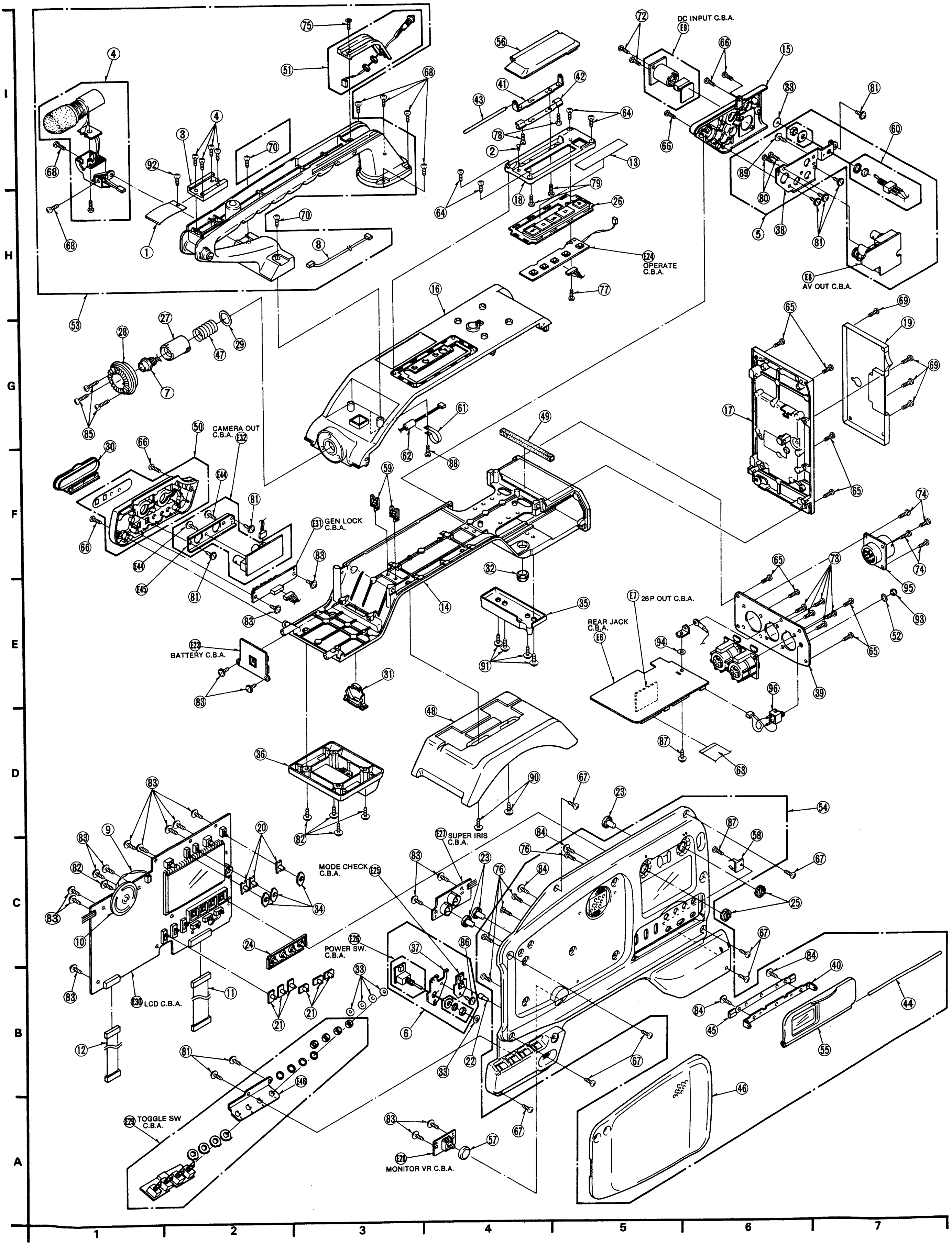

I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
57
16
26
34
61 × 14
50
51
33
59
62
3
1
2
48
E14 MECHANISM INTERFACE C.B.A.
CAM BUFFER C.B.A.
E17
D SUB 2 C.B.A. E18
E16 D/S SUB C.B.A.
PROCESS C.B.A.
E15
E43
E42
49
64
43
41
37
40
42
8
63
E10 POWER C.B.A.
72
52
7
5
6
E13 AUDIO/SYSCON C.B.A.
18
VIDEO SUB C.B.A.
E12
E11 VIDEO C.B.A.
36
35
44
56
58
27
25
17
70
28
55
30
31
68
67
E21 VTR START C.B.A.
15
66
10
E20 CCD DRIVE C.B.A.
39
38
46
65
E19 CCD PULSE C.B.A.
9
45
47
4

3. Frame & Casing Parts Section (1)

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1		VMP4268	MECHANISM ANGLE (L)	1	
2		VJF0300	CLAMPER	2	
3		VMP4269	MECHANISM ANGLE (R)	1	
4		VMP4271	CAMERA C.B.A. ANGLE	1	
5		VMP4272	PROCESS C.B.A. ANGLE	1	
6		VMP4273	C.B.A. ROTATE ANGLE (L)	1	
7		VMP4274	C.B.A. ROTATE ANGLE (R)	1	
8		VSC4024	SHIELD PLATE	1	
9		VSC4013	SHIELD PLATE (A)	1	
10		VSC4014	SHIELD PLATE (B)	1	
15		VMG0646	SPACER	1	
16		VMG0796	CASSETTE COVER RUBBER	1	
17		VDW0249	FOCUS RING	1	
18		VXA5303	P.C.B. SUPORT ANGLE	1	
25		VHD0809	FOCUS RING KNOB	1	
26		VGQ3416	CASSETTE RUBBER HOLDER	1	
27		VGU6513	FILTER KNOB	1	
28		VKF2125	MOUNT CAP	1	
30		VGU6714	VTR START KNOB	1	
31		VEK6694	LENS INTERFACE CABLE U	1	
33		VYK5564	SIDE CASE (L) U.	1	
34		VYF2053	CASSETTE COVER U.	1	
36		VYQ0988	CAMERA U	1	
37		VWJ12C2105L0	POWER FLEX. CABLE (1)	1	
38		VWJ16SW070L1	CCD FLEX. CABLE (1)	1	
39		VWJ17SW070L1	CCD FLEX. CABLE (2)	1	
40		VWJ18C2150L0	PROCESS FLEX. CABLE (1)	1	
41		VWJ22C2100L0	POWER FLEX. CABLE (2)	1	
42		VWJ25C2050L0	PROCESS FLEX. CABLE (2)	2	
43		VWJ26C2180L0	VIDEO FLEX. CABLE	2	
44		VJF0804	LENS CABLE CLAMPER	1	
45		VJF1091	BUSHING	1	
46		VJF0496	CLAMPER	1	
47		VJF0909	CLAMPER	1	
48		VEE9025	EARTH CABLE	1	
49		VEE8861	3P CONNECTOR	1	
50		VHD0820	SCREW	4	
51		VMX1090	WASHER	4	
52		VHD0325	STEP SCREW	2	
55		XQN2+A4FZ	SCREW	1	
56		XSB2+5FZ	SCREW	1	
57		XSB26+8FZ	SCREW	2	
58		XSB3+6FZS	SCREW	8	
59		XSN26+4	SCREW	2	
61		XTB26+6GFZ	SCREW	14	
62		XTV26+4F	SCREW	8	
63		XYC3+BF6	SCREW	3	
64		XYE3+EF6R	SCREW	9	
65		XYN3+C6	SCREW	4	
66		XYN3+E6FR	SCREW	6	
67		XYN3+K6RS	SCREW	2	
68		XYN26+C6	SCREW	1	
69		XYN26+K6	SCREW	2	
70		XXEV26+W3FP	SCREW	2	
72		XWGV4Y12G	WASHER	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks

❹ Frame & Casing Parts Section (2)



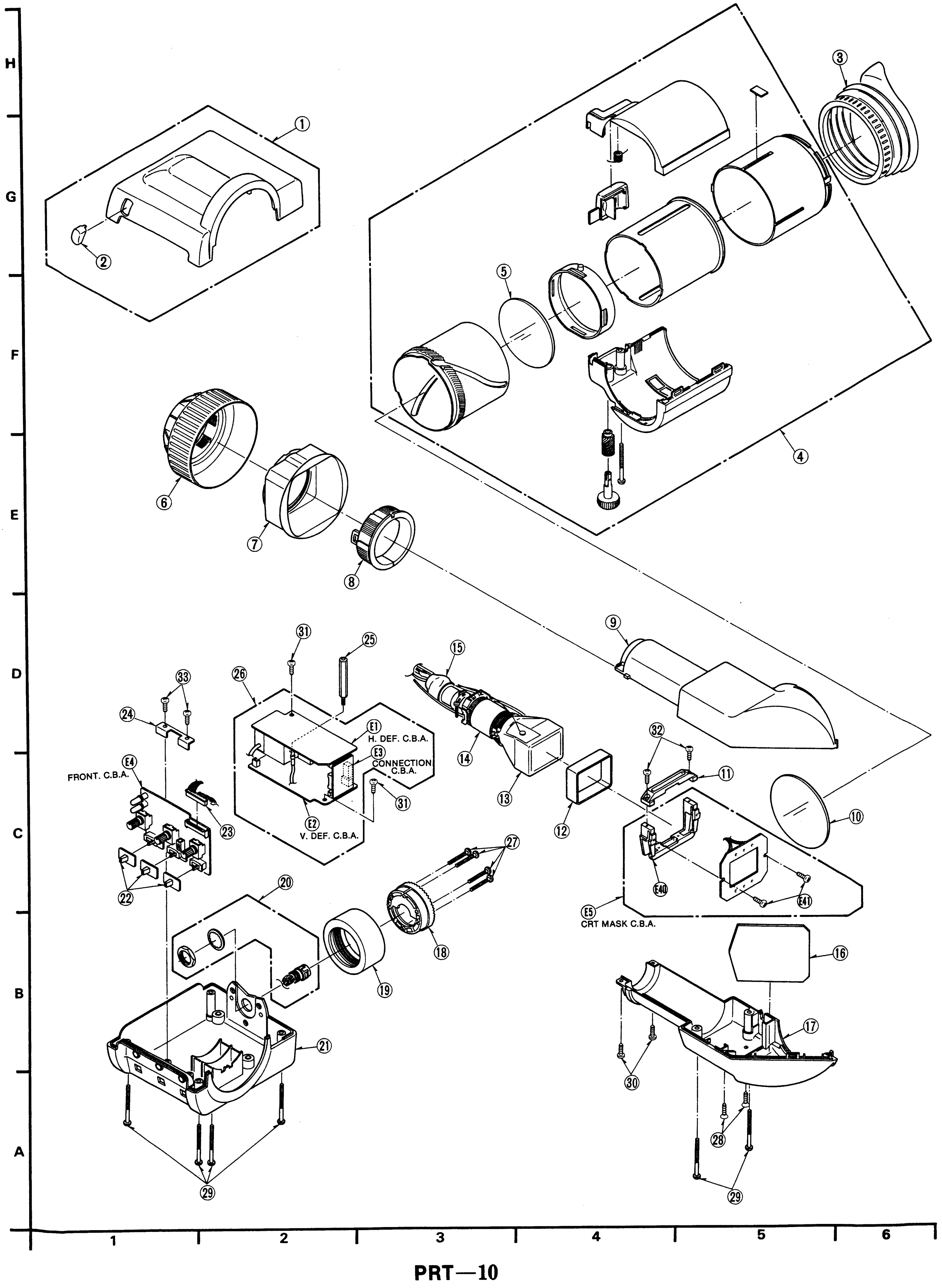
DC INPUT C.B.A.
E9
OPERATE C.B.A.
E24
AV OUT C.B.A.
E8
CAMERA OUT C.B.A.
E32
E44
E45
GEN LOCK C.B.A.
E31
BATTERY C.B.A.
E23
26P OUT C.B.A.
E7
REAR JACK C.B.A.
E6
SUPER IRIS C.B.A.
E27
MODE CHECK C.B.A.
E25
POWER SW. C.B.A.
E26
LCD C.B.A.
E30
TOGGLE SW C.B.A.
E29
E46
MONITOR VR C.B.A.
E28
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7

4. Frame & Casing Parts Section (2)

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1		4G28145	SPRING	1	
2		QBG1210X	RUBBER	1	
3		V5MA0046A4	SHOE	1	
4		VEK6714	MIC U.	1	
7		VEK7036	EVF INTERFACE CABLE U.	1	
8		VEE8855	MIC CABLE	1	
9		VEE8847	SPEAKER CABLE	1	
10		EAS3P127B	SPEAKER	1	
11		VEE8844	LCD CABLE	1	
12		VEE8846	TOGGLE SW CABLE	1	
13		VGH3019	KEY BOARD LABEL	1	
14		VGM1059	BOTTOM CASE	1	
15		VGM1063	AV JACK PANEL	1	
16		VGM1057	TOP CASE	1	
17		VEJ1125	ANTONBAUER BATTERY HOLDER	1	
18		VGK2058	KEY BOARD FRAME	1	
19		VGF0435	BACK COVER SEET	1	
20		VGU6028	SLIDE KNOB (A)	3	
21		VGU6514	SLIDE KNOB (B)	6	
22		VGU4906	MODE CHECK KNOB	1	
23		VGU6511	PUSH BUTTON	3	
24		VGU5973	OPERATION BUTTON	1	
25		VGU6512	VR KNOB	2	
26		VGU6577	KEY BOARD BUTTON	1	
27		VGQ3455	EVF CONNECTOR HOLDER	1	
28		VGQ3454	EVF HOLD BASE	1	
29		VGF0514	SPACER	1	
30		VKF2142	GEN LOCK COVER	1	
31		VKF1707	BATTER COVER	1	
32		VMG0643	BRAKER SW BUTTON	1	
33		VMG0646	RUBBER	6	
34		VMG0743	SLIDE KNOB RUBBER	3	
35		VMP4289	TRIPOD ANGLE (REAR)	1	
36		VMP4288	TRIPOD ANGLE (FRONT)	1	
37		VMP4285	POWER SW C.B.A. ANGLE	1	
38		VMP4264	AV JACK ANGLE	1	
39		VMP4270	JACK C.B.A. ANGLE	1	
40		VMP4266	OPERATION DOOR ANGLE	1	
41		VMP3736	KEY BOARD DOOR ANGLE	1	
42		VMC0883	KEY BOARD DOOR SPRING	1	
43		VMS4947	KEY BOARD DOOR SHAFT	1	
44		VMS5520	OPERATION DOOR SHAFT	1	
45		VMC0982	OPERATION DOOR SPRING	1	
46		VMT0529	FACE PAD	1	
47		VMB2224	SPRING	1	
48		VMT0530	SHOULDER PAD	1	
49		VMT0551	RUBBER	1	
50		VYP5483	GEN LOCK PANEL U.	1	
51		VYF1888	TALLY COVER U.	1	
52		VMX0531	SPACER	1	
53		VYH0148	HANDLE U.	1	
54		VYP5480	SIDE CASE (R) U.	1	
55		VYF2043	OPERATION DOOR U.	1	
56		VKW1642	KEY BOARD DOOR	1	
57		VXU1214	VR KNOB U.	1	
58		VJF1092	CLAMPER	1	
59		VJF0909	CLAMPER	1	
60		VST0129	POWER SELECT SW U.	1	
61		VJF0980	CLAMPER	1	
62		VLP0186	FERRITE CORE	1	
63		VWJ26C2180L0	FLEX. CABLE	1	
64		XSB2+6FZ	SCREW	4	
65		XSB3+6FZS	SCREW	8	
66		XSB3+10FZS	SCREW	5	
67		XSB3+12FZS	SCREW	7	
68		XSB3+8FZS	SCREW	6	
69		XSB4+6FZS	SCREW	4	
70		XSB4+16FZS	SCREW	2	
71		XSN2+6FZ	SCREW	4	
72		XSN26+6FC	SCREW	2	
73		XSN26+6FZ	SCREW	5	
74		XSN3+6FCS	SCREW	4	
75		XSS3+6FZS	SCREW	1	
76		XTN3+6G	SCREW	5	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
77		XTN2+5J	SCREW	1	
78		XTB26+4FFZ	SCREW	2	
79		XTV26+5F	SCREW	2	
80		XTV3+6GFZ	SCREW	2	
81		XYN3+C6	SCREW	8	
82		XYN3+K8	SCREW	5	
83		XYN3+K6RS	SCREW	18	
84		XYN26+C4	SCREW	4	
85		XYN26+C16FZ	SCREW	3	
86		XYN26+K6FR	SCREW	1	
87		XYN26+K6	SCREW	2	
88		XYN3+F10	SCREW	1	
89		XYN3+C4	SCREW	1	
90		XYN3+F8	SCREW	2	
91		XYN3+F8FZS	SCREW	4	
92		YWFAC17XFM2	SCREW	1	
93		VHN0194	NUT	1	
94		XWGV328G	WASHER	1	
95		VJP1957	VTR CONNECTOR	1	
96		VJJ0353	EAR PHONE JACK	1	

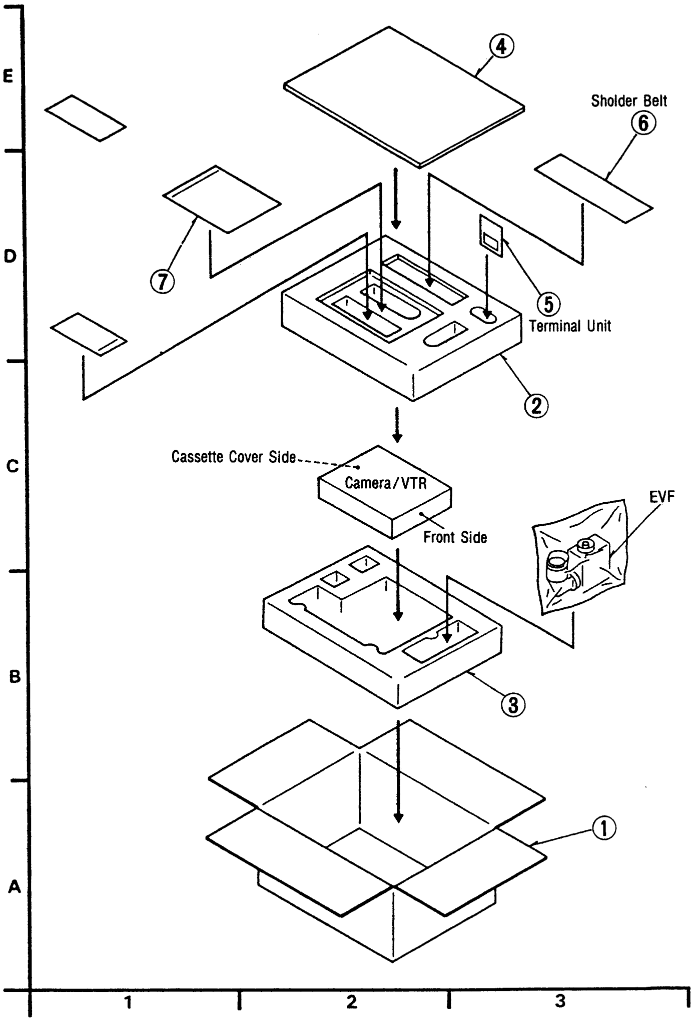
❺ EVF Section


H
G
F
E
D
C
B
A
1
2
3
4
5
6
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
㉑
㉒
㉓
㉔
㉕
㉖
㉗
㉘
㉙
㉚
㉛
㉜
㉝
E1 H. DEF. C.B.A.
E2 V. DEF. C.B.A.
E3 CONNECTION C.B.A.
E4 FRONT. C.B.A.
E5 CRT MASK C.B.A.
E40
E41

5. EVF Section

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1		VYK5574	EVF MAIN CASE UPPER U.	1	
2		VGP3621	TALLY LAMP COVER	1	
3		VMG0799	EYE CAP	1	
4		VYC0608	EYE PIECE U.	1	
5		VDL0416	LENS	1	
6		VGP3619	LOCK RING (OUTER)	1	
7		VMX2305	LOCK RING SPACER	1	
8		VGP3620	LOCK RING (INNER)	1	
9		VGP3617	CRT CASE UPPER	1	
10		VDL0418	PROTECT COVER	1	
11		VJF0899	CRT HOLDER UPPER	1	
12		VMX1899	CRT SPACER	1	
13		M04KYS07WB	CRT	1	<!>
14		ELY15V114G	DEFLECTION YOKE	1	<!>
15		VEK7034	CRT SOCKET U.	1	
16		VDL0417	MIRROR	1	
17		VGP3618	CRT CASE LOWER	1	
18		VGQ3433	EVF GEAR	1	
19		VMP3385	EVF FIX. RING	1	
20		VEK7037	EVF CONNECTION U.	1	
21		VGM1068	EVF MAIN CASE LOWER U.	1	
22		VGU3364	SLIDE KNOB	3	
23		VEE8849	FRONT C.B.A. CABLE	1	
24		VMP4283	C.B.A. HOLDER	1	
25		VMX2308	SPACER	1	
27		XYN3+C14FZ	SCREW	4	
28		XTS2+6GFZ	SCREW	2	
29		XTN3+25GFZ	SCREW	6	
30		XTN2+6G	SCREW	2	
31		XYN26+K6FR	SCREW	2	
32		XTN2+10G	SCREW	2	
33		XTN3+6G	SCREW	2	

❻ Packing Parts Section



6. Packing Parts Section

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1		VPG7522	PACKING CASE	1	
2		VPN3920	CUSHION (UPPER)	1	
3		VPN3921	CUSHION (LOWER)	1	
4		VPN3922	PAD	1	
5		VEJ1439	TERMINAL UNIT	1	
6		VFC0604	SHOULDER BELT	1	
7		VQT5529	OPERATING INSTRUCTIONS (ENGLISH)	1	
7		VQT5779	OPERATING INSTRUCTIONS (FRENCH)	1	

ELECTRICAL REPLACEMENT PARTS LIST

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
E1	VEP27086A	P.C.BOARD W/COMPONENT H-DEF	1	(RTL)<R>
E2	VEP27087A	P.C.BOARD W/COMPONENT V-DEF	1	(RTL)<R>
E3	VEP27088A	P.C.BOARD W/COMPONENT CN	1	(RTL)<R>
E4	VEP27089A	P.C.BOARD W/COMPONENT FRONT	1	(RTL)<R>
E5	VEP27090A	P.C.BOARD W/COMPONENT CRT MASK	1	(RTL)<R>
E6	VEP01585B	P.C.BOARD W/COMPONENT JACK	1	(RTL)<R>
E7	VEP00U89A	P.C.BOARD W/COMPONENT AUDIO OUT (26P OUT)	1	(RTL)<R> FOR VEP01585B
E8	VEP00U24A	P.C.BOARD W/COMPONENT AV JACK	1	(RTL)<R>
E9	VEP00U51A	P.C.BOARD W/COMPONENT DC INPUT	1	(RTL)<R>
E10	VEP01584A	P.C.BOARD W/COMPONENT POWER	1	(RTL)<R>
E11	VEP03B01A	P.C.BOARD W/COMPONENT VIDEO	1	(RTL)<R>
E12	VEP00U81A	P.C.BOARD W/COMPONENT VIDEO SUB	1	(RTL)<R> FOR VEP03B01A
E13	VEP04442B	P.C.BOARD W/COMPONENT AUDIO & SYSCON	1	(RTL)<R>
E14	VEP06957A	P.C.BOARD W/COMPONENT MECHA INTERFACE	1	(RTL)<R>
E15	VEP23198C	P.C.BOARD W/COMPONENT PROCESS	1	(RTL)<R>
E16	VEP23218A	P.C.BOARD W/COMPONENT D/S SUB	1	(RTL)<R> FOR VEP23198C
E17	VEP23226A	P.C.BOARD W/COMPONENT CAMERA BUFFER	1	(RTL)<R> FOR VEP23198C
E18	VEP23230A	P.C.BOARD W/COMPONENT D/S SUB 2	1	(RTL)<R> FOR VEP23198C
E19	VEP20490A	P.C.BOARD W/COMPONENT CAMERA PULSE (CCD PULSE)	1	(RTL)<R>
E20	VEP20491A	P.C.BOARD W/COMPONENT CAMERA DRIVE (CCD DRIVE)	1	(RTL)<R>
E21	VEP00U25A	P.C.BOARD W/COMPONENT VTR START	1	(RTL)<R>
E23	VEP00U26A	P.C.BOARD W/COMPONENT BATTERY		(RTL)<R>
E24	VEP86143A	P.C.BOARD W/COMPONENT OPERATE	1	(RTL)<R>
E25	VEP00U21A	P.C.BOARD W/COMPONENT MODE CHECK SW	1	(RTL)<R>
E26	VEP00U56A	P.C.BOARD W/COMPONENT POWER SW	1	(RTL)<R>
E27	VEP00U18A	P.C.BOARD W/COMPONENT SUPER IRIS	1	(RTL)<R>
E28	VEP00U19A	P.C.BOARD W/COMPONENT MONITOR VR	1	(RTL)<R>
E29	VEP00U20A	P.C.BOARD W/COMPONENT TOGGLE SW	1	(RTL)<R>
E30	VEP06956A	P.C.BOARD W/COMPONENT LCD	1	(RTL)<R>
E31	VEP00U22A	P.C.BOARD W/COMPONENT GENLOCK	1	(RTL)<R>
E32	VEP00U23A	P.C.BOARD W/COMPONENT CAMERA OUT	1	(RTL)<R>
E33	VEK5868	P.C.BOARD W/COMPONENT FE HEAD	1	(RTL)<R>
E34	VEP03B06A	P.C.BOARD W/COMPONENT RT FPC	1	(RTL)<R>
E35	VEK6035	P.C.BOARD W/COMPONENT PHOTO HOLDER (L)	1	(RTL)<R>
E36	VEK6098	P.C.BOARD W/COMPONENT PHOTO HOLDER (R)	1	(RTL)<R>
E37	VES0689	P.C.BOARD W/COMPONENT MECHANISM CONNECTION	1	(RTL)<R>
E40	VJF0900	CRT MASK C.B.A. ANGLE	1	
E41	XTN2+4G	SCREW	1	
E42	VMX2320	CLAMPER	1	
E43	VMX2321	CLAMPER	1	
E44	XTN3+C6FCS	SCREW	1	
E45	VMP4263	CAMERA OUT C.B.A.ANGLE	1	
E46	VMP4267	TOGGLE SW ANGLE	1	
	VEP27086A	P.C.BOARD W/COMPONENT H-DEF		
		CAPACITORS		
C7401,02	ECEA1AGE221	E.CAPACITOR 10V 220U	2	
C7403	VCF0066J123	P.CAPACITOR 0.012U	1	
C7404	VCF0066J332	P.CAPACITOR 3300P	1	
C7407	ECEA1HGE101	E.CAPACITOR 50V 100U	1	
C7408,09	ECKD3A472MEH	C.CAPACITOR 1000V 4700P	2	
C7410	VCF0066J223	P.CAPACITOR 0.022U	1	
C7414	VCF0066J182	P.CAPACITOR 1800P	1	
C7416	VCEA0JAP330	E.CAPACITOR 6.3V 33U	1	
C7417	ECEA1AGE221	E.CAPACITOR 10V 220U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D7401	EC11FS2	DIODE	1	<R>
D7402	MA142K	DIODE	1	<R>
D7403	MA141K	DIODE	1	<R>
D7404	EC11FS2	DIODE	1	<R>
D7405	MA141K	DIODE	1	<R>
L7402	ELH5L220	COIL	1	
L7403	VLQEL06F220J	COIL 22UH	1	
L7404	VLQ0620	COIL	1	
P7007	VJP2264	CONNECTOR (MALE)	1	
P7011	VJP1232T	CONNECTOR (MALE)	1	
P7013	VJP1595T	CONNECTOR (MALE)	1	
Q7402,03	2SK1954	TRANSISTOR	2	<R>
		RESISTORS		
R7405	ERJ3GEYJ105	M.RESISTOR CH 3W 1M	1	
R7406	ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R7408	ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R7409-11	ERJ3GEYJ105	M.RESISTOR CH 3W 1M	3	
R7412	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R7413,14	ERJ3GEYK155	M.RESISTOR CH 3W 1.5M	2	
R7417	ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R7418	ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R7419	ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R7420	ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R7420	ERJ3GEYJ910	M.RESISTOR CH 3W 91	1	
T7401	ETF18L34A	TRANSFORMER	1	<!>
VR7402	EVMLRGA00B16	V.RESISTOR 1000K	1	
VR7403	EVML3GA00B55	V.RESISTOR 500K	1	
	VEP27087A	P.C.BOARD W/COMPONENT		
		V-DEF		
		CAPACITORS		
C7001	ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C7002	ECUX1H332KBV	C.CAPACITOR 50V 3300P	1	
C7003	ECA0JKF121	E.CAPACITOR 6.3V 120U	1	
C7005	ECGC1BA4R7	E.CAPACITOR 12.5V 4.7U	1	
C7007	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C7009	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C7010	ECST1CY105Z	T.CAPACITOR 16V 1U	1	
C7011	ECUX1E223KBV	C.CAPACITOR 25V 0.022U	1	
C7012	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C7013	ECUM1C224ZFV	C.CAPACITOR CH 16V 0.22U	1	
C7014	ECST1CX106Z	T.CAPACITOR 16V 10U	1	
C7015	ECUX1H682KBV	C.CAPACITOR 50V 6800P	1	
C7016	ECUM1H222JN	C.CAPACITOR CH 50V 2200P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C7017	ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C7018	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C7019	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C7020	ECST1CY105Z	T.CAPACITOR 16V 1U	1	
C7021	ECST1CY335Z	T.CAPACITOR 16V 3.3U	1	
C7022	ECUX1H472KBV	C.CAPACITOR 50V 4700P	1	
C7023	ECUX1H181JCV	C.CAPACITOR 50V 180P	1	
C7024	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C7025	ECA0JKF121	E.CAPACITOR 6.3V 120U	1	
C7026,27	ECST1CX106Z	T.CAPACITOR 16V 10U	2	
C7028	ECUX1H272KBV	C.CAPACITOR 50V 2700P	1	
C7029	ECST1CX106Z	T.CAPACITOR 16V 10U	1	
C7030	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C7033	ECA1CKF560	E.CAPACITOR 16V 56U	1	
C7035	VCEA1CAP330	E.CAPACITOR 16V 33U	1	
C7036	ECA0JKF121	E.CAPACITOR 6.3V 120U	1	
C7037	ECUM1H222JN	C.CAPACITOR CH 50V 2200P	1	
C7038	VCEA1EAP150	E.CAPACITOR 25V 15U	1	
C7039	ECUX1H221JCV	C.CAPACITOR 50V 220P	1	
C7040	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C7041	VCF0066J223	P.CAPACITOR 0.022U	1	
C7042	ECA1CKF150	E.CAPACITOR 16V 15U	1	
C7044	ECCF1H331JC	C.CAPACITOR 50V 330P	1	
D7001	MA3180	DIODE	1	<R>
D7002	EC10QS04	DIODE	1	<R>
D7003	MA141K	DIODE	1	<R>
D7004	MA143	DIODE	1	<R>
IC7001	TL5001CPS	IC	1	<R>
IC7002	HA11423MP	IC	1	<R>
IC7003	AN77L09M	IC	1	<R>
L7001	VLQ0177K151	COIL 150UH	1	
L7002-04	VLQ0319M6R8	COIL 6.8UH	3	
P7002	VJP1597T	CONNECTOR (MALE)	1	
P7014	VJP1595T	CONNECTOR (MALE)	1	
P7016	VJP2277	CONNECTOR (MALE)	1	
Q7001	2SD1819A-R	TRANSISTOR	1	<R>
Q7002	2SB1218AQR	TRANSISTOR	1	<R>
Q7003	2SJ278	TRANSISTOR	1	<R>
Q7005	2SD1819A-R	TRANSISTOR	1	<R>
Q7006	2SC3624	TRANSISTOR	1	<R>
Q7007	2SD1819A-R	TRANSISTOR	1	<R>
Q7008	2SA1411	TRANSISTOR	1	<R>
Q7009	2SB1218AQR	TRANSISTOR	1	<R>
Q7010	2SD1819A-R	TRANSISTOR	1	<R>
		RESISTORS		
R7001	ERQ16NK1R0	F.RESISTOR 1W 1.0	1	<!>
R7002	ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R7003	ERJ3GEYJ224	M.RESISTOR CH 3W 220K	1	
R7004,05	ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	2	
R7006	ERJ3GEYJ393	M.RESISTOR CH 3W 39K	1	
R7007	ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R7008	ERJ3GEYJ105	M.RESISTOR CH 3W 1M	1	
R7010	VRE0034E183	M.RESISTOR CH 1/10W 18K	1	
R7011	VRE0034E222	M.RESISTOR CH 1/10W 2.2K	1	
R7013	ERJ3GEYJ822	M.RESISTOR CH 3W 8.2K	1	
R7014	ERJ3GEYJ474	M.RESISTOR CH 3W 470K	1	
R7015	ERJ3GEYJ882	M.RESISTOR CH 3W 8.8K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7016		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R7017		ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R7018		ERJ3GEYJ100	M.RESISTOR CH 3W 10	1	
R7019		ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R7020		ERJ3GEYJ121	M.RESISTOR CH 3W 120	1	
R7021		ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R7022		VRE0034E123	M.RESISTOR CH 1/10W 12K	1	
R7023		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	1	
R7024		ERJ3GEYJ822	M.RESISTOR CH 3W 8.2K	1	
R7025		ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R7026		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R7027		ERJ3GEYJ562	M.RESISTOR CH 3W 5.6K	1	
R7028		ERJ3GEYJ682	M.RESISTOR CH 3W 6.8K	1	
R7029		ERJ3GEYJ393	M.RESISTOR CH 3W 39K	1	
R7030		ERJ3GEYJ221	M.RESISTOR CH 3W 220	1	
R7032		VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R7033		VRE0034E682	M.RESISTOR CH 1/10W 6.8K	1	
R7034		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R7035		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R7036		ERJ3GEYJ4R7	M.RESISTOR CH 3W 4.7	1	
R7037		ERJ3GEYJ562	M.RESISTOR CH 3W 5.6K	1	
R7038		ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R7039		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R7040		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R7041		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R7042		ERJ3GEYJ120	M.RESISTOR CH 3W 12	1	
R7043		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R7044		ERJ3GEYJ121	M.RESISTOR CH 3W 120	1	
R7045,46		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	2	
R7050		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R7051		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R7052		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R7053		ERJ3GEYJ512	M.RESISTOR CH 3W 5.1K	1	
VR7001		EVM7JGA00B52	V.RESISTOR 500	1	
VR7002		EVM7JGA00B53	V.RESISTOR 5K	1	
VR7003		EVM7JGA00B52	V.RESISTOR 500	1	
VR7004		EVM7JGA00B22	V.RESISTOR 200	1	
VR7005		VRV0113B500	V.RESISTOR 50	1	
VR7006		EVM7JGA00B53	V.RESISTOR 5K	1	
		VEP27088A	P.C.BOARD W/COMPONENT		
			EVF VIDEO		
P7003		VJP3450	CONNECTOR (MALE)	1	
P7005		VJP3450	CONNECTOR (MALE)	1	
P7008		VJP1599T	CONNECTOR (MALE)	1	
P7009		VJP1600T	CONNECTOR (MALE)	1	
Q7201		2SB1218AQR	TRANSISTOR	1	<R>
QR7202-05		UN5214	TRANSISTOR-RESISTOR	4	<R>
			RESISTORS		
R7201		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R7202		ERJ3GEYJ682	M.RESISTOR CH 3W 6.8K	1	
R7203		ERJ3GEYJ271	M.RESISTOR CH 3W 270	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7204		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R7205-09		ERJ3GEYJ562	M.RESISTOR CH 3W 5.6K	5	
		VEP27089A	P.C.BOARD W/COMPONENT		
			FRONT		
			CAPACITORS		
C7301		ECEA1HGE470	E.CAPACITOR 50V 47U	1	
C7302,03		ECST1AC226Z	T.CAPACITOR 10V 22U	2	
C7304		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C7305		ECST1AC226Z	T.CAPACITOR 10V 22U	1	
C7306		ECUX1H330JCV	C.CAPACITOR 50V 33P	1	
C7307		ECUX1H101JCV	C.CAPACITOR 50V 100P	1	
C7309,10		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C7313		ECUX1H330JCV	C.CAPACITOR 50V 33P	1	
C7314		ECUX1H221JCV	C.CAPACITOR 50V 220P	1	
C7315,16		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C7317		ECA0JKF560	E.CAPACITOR 6.3V 56U	1	
D7301,02		MA3047	DIODE	2	<R>
D7303,04		EBR5504S	DIODE	2	<R>
D7307		E562	DIODE	1	<R>
D7308		MA143	DIODE	1	<R>
DL7301		VLD0259	DELAY	1	
IC7301		TC7S04F	IC	1	<R>
IC7302		TC7S32F	IC	1	<R>
P7004		VJP2315	CONNECTOR (MALE)	1	
P7015		VJP1606T	CONNECTOR (MALE)	1	
Q7301-04		2SD1819A-R	TRANSISTOR	4	<R>
Q7305		2SC3624	TRANSISTOR	1	<R>
Q7306		2SA1411	TRANSISTOR	1	<R>
Q7307		2SB1218AQR	TRANSISTOR	1	<R>
Q7308		2SK316-Q	TRANSISTOR	1	<R>
Q7309		2SB1218AQR	TRANSISTOR	1	<R>
Q7310		2SD1821-QR	TRANSISTOR	1	<R>
Q7311		2SC4181	TRANSISTOR	1	<R>
Q7312		2SD1819A-R	TRANSISTOR	1	<R>
			RESISTORS		
R7301		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R7302		ERJ3GEYJ203	M.RESISTOR CH 3W 20K	1	
R7303		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R7304		ERJ3GEYJ181	M.RESISTOR CH 3W 180	1	
R7305,06		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	2	
R7307		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R7308		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R7309		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R7310		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R7311		ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7312		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R7313		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R7314		ERJ3GEYG224	M.RESISTOR CH 3W 220K	1	
R7315		VRE0034E913	M.RESISTOR CH 1/10W 91K	1	
R7316		VRE0034E223	M.RESISTOR CH 1/10W 22K	1	
R7317		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R7318		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7321		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R7322-24		VRE0034E102	M.RESISTOR CH 1/10W 1K	3	
R7325		ERJ3GEYJ391	M.RESISTOR CH 3W 390	1	
R7326		VRE0034E222	M.RESISTOR CH 1/10W 2.2K	1	
R7327		ERJ3GEYJ184	M.RESISTOR CH 3W 180K	1	
R7328		ERJ3GEYJ154	M.RESISTOR CH 3W 150K	1	
R7329		VRE0034E682	M.RESISTOR CH 1/10W 6.8K	1	
R7330		VRE0034E222	M.RESISTOR CH 1/10W 2.2K	1	
R7331		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R7332,33		VRE0034E562	M.RESISTOR CH 1/10W 5.6K	2	
R7335		ECUX1H0R5CCV	C.CAPACITOR 50V 0.5P	1	
R7336		ERJ3GEYG473	M.RESISTOR CH 3W 47K	1	
R7338		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7339		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R7341		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R7342		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R7345		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R7347		ER0S2CKG2701	M.RESISTOR 1/4W 2.7K	1	
R7348		ER0S2CKG4702	M.RESISTOR 1/4W 47K	1	
SW7301-03		VSS0186	SWITCH	3	<R>
VR7301		EVUFNAE03B13	V.RESISTOR 1K	1	
VR7302		EVUFNAE03B55	V.RESISTOR 500K	1	
VR7303		EVUFNAE03B15	V.RESISTOR 100K	1	
		VEP27090A	P.C.BOARD W/COMPONENT		
			CRT MASK		
D501		BG2232S	DIODE	1	<R>
D502-05		AY2232S	DIODE	4	<R>
D506		PR2232S	DIODE	1	<R>
		VEP01585B	P.C.BOARD W/COMPONENT		
			JACK		
		VEP00U89A	P.C.BOARD W/COMPONENT		ON VEP01585B
			AUDIO OUT		
			CAPACITORS		
C1,C2		ERDS2T0	C.RESISTOR 1/4W	2	
C3		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C1001		ECA1CM102	E.CAPACITOR 16V 1000U	1	
C1002,03		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	2	
C1004,05		ECHU1H103JB5	P.CAPACITOR 50V 0.01U	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C1006,07		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	2	
C1008,09		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	2	
C1010		ECHU1H103JB5	P.CAPACITOR 50V 0.01U	1	
C1011		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
C1012		ECHU1H103JB5	P.CAPACITOR 50V 0.01U	1	
C1013		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
C1014,15		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	2	
C1016,17		ECHU1H103JB5	P.CAPACITOR 50V 0.01U	2	
C1018,19		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	2	
C1020-23		ECEV1CV100Q	E.CAPACITOR 16V 10U	4	
C1024		ECA1EFQ560	E.CAPACITOR 25V 56U	1	
C1025		ECEV1HV3R3Q	E.CAPACITOR 50V 3.3U	1	
C1026		ECA1JFQ820	E.CAPACITOR 63V 82U	1	
C1027		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C1028,29		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C1030		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C1031,32		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C1033		ECEV0JV101Q	E.CAPACITOR 6.3V 100U	1	
C1034-36		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C1037		ECA0JM102	E.CAPACITOR 6.3V 1000U	1	
C1039		ECUM1H104KBM	C.CAPACITOR CH 50V 0.1U	1	
C1040		ECA1JFQ220	E.CAPACITOR 63V 22U	1	
CP1001		VSQ0834	REMOTE CONTROL UNIT	1	<!>
D1001,02		MA151K	DIODE	2	<R>
D1003-08		MA153	DIODE	6	<R>
D1009		E10QS10	DIODE	1	<R>
D1010		MA151K	DIODE	1	<R>
D1011-13		MA153	DIODE	3	<R>
D1014		RK34	DIODE	1	<R>
D1015		MA719	DIODE	1	<R>
D1016		MA161	DIODE	1	<R>
IC1		UPC4558G2	IC	1	<R>
IC1001		UPC5022GA089	IC	1	<R>
IC1002		LM2577MX-ADJ	IC	1	<R>
IC1003		M50927841FP	IC	1	<R>
IC1004		MN12821	IC	1	<R>
IC1005		MC74HCU04F	IC	1	<R>
IC1006		MC74HC4066F	IC	1	<R>
L1001-06		VLQ0163J100	COIL 10UH	6	
L1008,09		VLQ0407680K	COIL 68UH	2	
L1020		ERJ8GCYJ101	COIL 100UH	1	
P1010		VJS2907B026	CONNECTOR (FEMALE)	1	
P1011		VJP3125B015	CONNECTOR (MALE)	1	
P1012		VJP1604T	CONNECTOR (MALE)	1	
P1013		VJP1242T	CONNECTOR (MALE)	1	
P1014		VJP1244T	CONNECTOR (MALE)	1	
P1015		VJP1243T	CONNECTOR (MALE)	1	
P1016		VJP1229T	CONNECTOR (MALE)	1	
P1017		VJP1608T	CONNECTOR (MALE)	1	
P1018,19		VJP1607T	CONNECTOR (MALE)	2	
P1020		VJP1242T	CONNECTOR (MALE)	1	
P1021,22		VJS3551	CONNECTOR (FEMALE)	2	
Q1001,02		2SB792-QR	TRANSISTOR	2	<R>
Q1003		2SB970X	TRANSISTOR	1	<R>
Q1004		2SJ245S	TRANSISTOR	1	<R>
Q1005		2SD601A-R	TRANSISTOR	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR1001		UN2113	TRANSISTOR-RESISTOR	1	<R>
QR1002		UN221F	TRANSISTOR-RESISTOR	1	<R>
QR1003		UN2113	TRANSISTOR-RESISTOR	1	<R>
QR1004		UN221F	TRANSISTOR-RESISTOR	1	<R>
QR1005,06		UN2113	TRANSISTOR-RESISTOR	2	<R>
QR1007,08		UN2213	TRANSISTOR	2	<R>
			RESISTORS		
R1,R2		ERJ6GEYJ103	M.RESISTOR CH1/16W 10K	2	
R3		ERJ6GEYJ472	M.RESISTOR CH1/16W 4.7K	1	
R4,R5		ERJ6GEYJ103	M.RESISTOR CH1/16W 10K	2	
R7,R8		ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	2	
R1001-03		ERJ6GEYJ682	M.RESISTOR CH1/16W 6.8K	3	
R1004,05		VRE0034E562	M.RESISTOR CH 1/10W 5.6K	2	
R1006		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R1007		VRE0034E221	M.RESISTOR CH 1/10W 220	1	
R1008-13		ERJ6GEYJ682	M.RESISTOR CH1/16W 6.8K	6	
R1014,15		VRE0034E562	M.RESISTOR CH 1/10W 5.6K	2	
R1016		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R1017		VRE0034E221	M.RESISTOR CH 1/10W 220	1	
R1019		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R1021		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R1024		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R1026		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R1028		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R1031,32		ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	2	
R1034,35		ERJ6GEYJ473	M.RESISTOR CH1/16W 47K	2	
R1036		ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	1	
R1037		ERJ6GEYJ103	M.RESISTOR CH1/16W 10K	1	
R1038		ERJ6GEYJ473	M.RESISTOR CH1/16W 47K	1	
R1039		ERJ6GEYJ332	M.RESISTOR CH1/16W 3.3K	1	
R1040		ERJ6GEYJ681	M.RESISTOR CH1/16W 680	1	
R1041		VRE0034E683	M.RESISTOR CH 1/10W 68K	1	
R1042		VRE0034E182	M.RESISTOR CH 1/10W 1.8K	1	
R1043		ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	1	
R1044,45		ERJ6GEYJ223	M.RESISTOR CH1/16W 22K	2	
R1046		ERJ6GEYJ471	M.RESISTOR CH1/16W 470	1	
R1047		ERJ6GEYJ102	M.RESISTOR CH1/16W 1K	1	
R1048		ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	1	
R1049		ERJ6GEYJ105	M.RESISTOR CH1/16W 1M	1	
R1050		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R1051,52		ERJ6GEYJ101	M.RESISTOR CH1/16W 100	2	
R1053		ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	1	
R1054		ERJ6GEYJ155	M.RESISTOR CH1/16W 1.5M	1	
R1055		ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	1	
R1056		ERJ6GEYJ155	M.RESISTOR CH1/16W 1.5M	1	
R1057-67		ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	11	
R1068-70		ERJ6GEYJ101	M.RESISTOR CH1/16W 100	3	
R1071		ERJ6GEYJ103	M.RESISTOR CH1/16W 10K	1	
R1072		ERJ6GEYJ222	M.RESISTOR CH1/16W 2.2K	1	
R1073		VSF0092	FUSE	1	
R1074		ERJ6GEYJ103	M.RESISTOR CH1/16W 10K	1	
R1075		ERJ6GEYG680	M.RESISTOR CH1/16W 68	1	
R1076,77		ERJ6GEYJ103	M.RESISTOR CH1/16W 10K	2	
R1078		ERDS2TJ390	C.RESISTOR 1/4W 39	1	
RY1001,02		VSY2036	RELAY	2	
SW1001		VSS0342	SWITCH	1	<R>
X1001		VSX0128	CRYSTAL OSCILLATOR	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP00U24A	P.C.BOARD W/COMPONENT		
			AV JACK		
			CAPACITORS		
C9701-04		ECEA0GKA471	E.CAPACITOR 470U	4	
J3		VJS3154	CONNECTOR (FEMALE)	1	
J4		VJS3155	CONNECTOR (FEMALE)	1	
J5		VJJ0323	PIN JACK	1	
L9701,02		VLP0083	COIL	2	
P9700		VJP1610T	CONNECTOR (MALE)	1	
P9701		VJP1607T	CONNECTOR (MALE)	1	
			RESISTORS		
R9701		ERDS2TJ750	C.RESISTOR 1/4W 75	1	
R9702		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R9703		ERDS2TJ750	C.RESISTOR 1/4W 75	1	
R9704		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R9705		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
		VEP00U51A	P.C.BOARD W/COMPONENT		
			DC INPUT		
D1		S3V40	DIODE	1	<R>
		VEP01584A	P.C.BOARD W/COMPONENT		
			POWER		
			CAPACITORS		
C1001		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C1002		ECEV1HV3R3Q	E.CAPACITOR 50V 3.3U	1	
C1003		ECUX1H121JCV	C.CAPACITOR 50V 120P	1	
C1004		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1005		ECUX1H471JCV	C.CAPACITOR 50V 470P	1	
C1007		ECUX1H471JCV	C.CAPACITOR 50V 470P	1	
C1008		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1009,10		ECUX1H102JV	C.CAPACITOR 50V 1000P	2	
C1011		ECA1EFQ121	E.CAPACITOR 25V 120U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C1012		ECUX1H680JCV	C.CAPACITOR 50V 68P	1	
C1013		ECUX1H471JCV	C.CAPACITOR 50V 470P	1	
C1014		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1015		ECUX1H681JV	C.CAPACITOR 50V 680P	1	
C1016		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C1018		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C1020		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C1022		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C1024		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C1025		ECUX1H681JV	C.CAPACITOR 50V 680P	1	
C1027		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C1032		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C1034		ECUX1H471JCV	C.CAPACITOR 50V 470P	1	
C1035		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C1037,38		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C1039		ECEV1HV3R3Q	E.CAPACITOR 50V 3.3U	1	
C1040		ECEV1HV010Q	E.CAPACITOR 50V 1U	1	
C1042		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C1043		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1044,45		ECUX1H471JCV	C.CAPACITOR 50V 470P	2	
C1046		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1047,48		ECUX1H102JV	C.CAPACITOR 50V 1000P	2	
C1049		ECUX1H471JCV	C.CAPACITOR 50V 470P	1	
C1050		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1051		ECUX1H680JCV	C.CAPACITOR 50V 68P	1	
C1052		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C1053		ECUX1H681JV	C.CAPACITOR 50V 680P	1	
C1060		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C1061		ECUX1H681JV	C.CAPACITOR 50V 680P	1	
C1062		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C1063		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C1070		ECUX1H222KBV	C.CAPACITOR 50V 2200P	1	
C1071		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C1073		ECUX1H471JCV	C.CAPACITOR 50V 470P	1	
C1074		ECA1EFQ221	E.CAPACITOR 25V 220U	1	
C1075		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C1092		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C1098		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C1101		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C1102		VCEA1DAP101	E.CAPACITOR 2V 100U	1	
C1106		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C1107		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C1109		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C1127		ECEV1HV010Q	E.CAPACITOR 50V 1U	1	
C1128		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C1131		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C1133		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C1135,36		ECA1EFQ121	E.CAPACITOR 25V 120U	2	
C1138		ECA1EFQ221	E.CAPACITOR 25V 220U	1	
C1139		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C1140-42		VCEA1DAP101	E.CAPACITOR 2V 100U	3	
C2001		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C2002		ECUX1H222KBV	C.CAPACITOR 50V 2200P	1	
C2003		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C2004		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2005		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C2006		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C2007		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C2008		ECEV0JV470Q	E.CAPACITOR 6.3V 47U	1	
C2009		ECUM1C334KBM	C.CAPACITOR CH 16V 0.33U	1	
C2010		ECUX1H182KBV	C.CAPACITOR 50V 1800P	1	
C2014-16		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C2017		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	1	
C2018		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C2019		ECEV0JV470Q	E.CAPACITOR 6.3V 47U	1	
C2020		ECUM1E105ZFM	C.CAPACITOR CH 25V 1U	1	
C2021		ECEV0JV470Q	E.CAPACITOR 6.3V 47U	1	
C2022		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C2023-25		ECEV1HNR47Q	E.CAPACITOR 50V 0.47U	3	
C2026		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C2027		ECEV1HVR47Q	E.CAPACITOR 50V 0.47U	1	
C2028-30		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	3	
C2031		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C2032		ECEV1EV330Q	E.CAPACITOR 25V 33U	1	
C2033,34		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2035		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C2036		ECEV1HV4R7Q	E.CAPACITOR 50V 4.7U	1	
C2037		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C2038,39		ECUX1H561JCV	C.CAPACITOR 50V 560P	2	
C2040		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C2041		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C2042		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C2043		VCC0037F432	C.CAPACITOR 4300P	1	
C2044		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C2047		ECEV1EV330Q	E.CAPACITOR 25V 33U	1	
C2048,49		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C2050		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C2052		ECUM1E105ZFM	C.CAPACITOR CH 25V 1U	1	
C2053		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C2055		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C2056		ECUM1E105ZFM	C.CAPACITOR CH 25V 1U	1	
C2057		ECUX1H182KBV	C.CAPACITOR 50V 1800P	1	
C2059		ECUM1E105ZFM	C.CAPACITOR CH 25V 1U	1	
C2060		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C2061		ECUM1E105ZFM	C.CAPACITOR CH 25V 1U	1	
C2062		ECA1EFQ121	E.CAPACITOR 25V 120U	1	
C2064,65		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	2	
C2066,67		ECUX1H471JCV	C.CAPACITOR 50V 470P	2	
C2069		ECUX1H471JCV	C.CAPACITOR 50V 470P	1	
C2070		ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
C2071		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C2072		ECUX1H121JCV	C.CAPACITOR 50V 120P	1	
C2073-75		ECUX1H102JV	C.CAPACITOR 50V 1000P	3	
C2076		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	1	
C2077		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C2078-80		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
D1003		MA143	DIODE	1	<R>
D1006,07		MA3200-M	DIODE	2	<R>
D1008,09		MA736	DIODE	2	<R>
D1016		MA143	DIODE	1	<R>
D1017,18		MA736	DIODE	2	<R>
D1028,29		MA736	DIODE	2	<R>
D1034,35		MA736	DIODE	2	<R>
D2001		MA3062M	DIODE	1	<R>
D2002		MA143	DIODE	1	<R>
D2003		MA3100	DIODE	1	<R>
D2010		MA728	DIODE	1	<R>
D2011,12		MA736	DIODE	2	<R>
D2013		MA728	DIODE	1	<R>
IC1001,02		BA9703K	IC	2	<R>
IC2001		AN3893NFHP	IC	1	<R>
IC2002		UN224	TRANSISTOR	1	<R>
IC2003		AN3841SR	IC	1	<R>
IC2004		BA6219BFPY	IC	1	<R>
IC2005		TL1451CNS	IC	1	<R>
IC2006		UPC4558G2	IC	1	<R>
IC2007		UPC393G2	IC	1	<R>
IC2008		UPC4558G2	IC	1	<R>
IC2009		UPC393G2	IC	1	<R>
IC2010		UPC4558G2	IC	1	<R>
L1001		VLQ0407120M	COIL 12UH	1	
L1002		VLQ0622	COIL	1	
L1005-08		VLQ0407680K	COIL 68UH	4	
L1009		VLQ0622	COIL	1	
L1014		VLQ0407680K	COIL 68UH	1	
L1015		VLQ0621	COIL	1	
L1017,18		VLQ0407680K	COIL 68UH	2	
L1023		VLQ0621	COIL	1	
L1024		VLQ0407680K	COIL 68UH	1	
L1029		VLQ0407680K	COIL 68UH	1	
L1037		VLQ0621	COIL	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L1042		VLQ0407680K	COIL 68UH	1	
L1043,44		VLQ0319K680	COIL 68UH	2	
L1045		VLQ0319K470	COIL 47UH	1	
L2001		VLQ0407120M	COIL 12UH	1	
L2002		VLQ0129	COIL	1	
L2004		VLQ0407151K	COIL 150UH	1	
P1001,02		VJS2889A025	CONNECTOR (FEMALE)	2	
P1003		VJP1229T	CONNECTOR (MALE)	1	
P2001		VJS2117	CONNECTOR (FEMALE)	1	
P2002		VJS2889A022	CONNECTOR (FEMALE)	1	
Q1001,02		2SB1202-S	TRANSISTOR	2	<R>
Q1004-06		2SJ245S	TRANSISTOR	3	<R>
Q1008		2SK1059-Z	TRANSISTOR	1	<R>
Q1010,11		2SJ245S	TRANSISTOR	2	<R>
Q1012		2SD1820AQR	TRANSISTOR	1	<R>
Q1014		2SD1820AQR	TRANSISTOR	1	<R>
Q1015		2SB1219AQR	TRANSISTOR	1	<R>
Q1016		2SD1820AQR	TRANSISTOR	1	<R>
Q1017		2SB1219AQR	TRANSISTOR	1	<R>
Q1018		2SD1820AQR	TRANSISTOR	1	<R>
Q1019		2SB1219AQR	TRANSISTOR	1	<R>
Q1020		2SD1820AQR	TRANSISTOR	1	<R>
Q1021		2SB1219AQR	TRANSISTOR	1	<R>
Q2002		2SD1819A-R	TRANSISTOR	1	<R>
Q2003,04		2SB1073-QR	TRANSISTOR	2	<R>
QR1005,06		XN1501	TRANSISTOR-RESISTOR	2	<R>
QR1010		UN5211	TRANSISTOR-RESISTOR	1	<R>
QR2001		UN5211	TRANSISTOR-RESISTOR	1	<R>
QR2002		UN5111	TRANSISTOR-RESISTOR	1	<R>
			RESISTORS		
R1001		VRE0034E393	M.RESISTOR CH 1/10W 39K	1	
R1002		VRE0034E183	M.RESISTOR CH 1/10W 18K	1	
R1003		ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	
R1004,05		VRE0034E182	M.RESISTOR CH 1/10W 1.8K	2	
R1006		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R1007		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R1008		ERJ3GEYJ151	M.RESISTOR CH 3W 150	1	
R1009		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R1010		ERJ3GEYJ151	M.RESISTOR CH 3W 150	1	
R1011,12		ERJ3GEYJ470	M.RESISTOR CH 3W 47	2	
R1014		ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R1015		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R1016		ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R1017		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R1018		VRE0034E563	M.RESISTOR CH 1/10W 56K	1	
R1019		VRE0034E822	M.RESISTOR CH 1/10W 8.2K	1	
R1020		VRE0034E472	M.RESISTOR CH 1/10W 4.7K	1	
R1021		VRE0034E182	M.RESISTOR CH 1/10W 1.8K	1	
R1024		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R1025		VRE0034E393	M.RESISTOR CH 1/10W 39K	1	
R1026		VRE0034E183	M.RESISTOR CH 1/10W 18K	1	
R1027		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R1028,29		VRE0034E182	M.RESISTOR CH 1/10W 1.8K	2	
R1031		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R1032		ERJ3GEYJ151	M.RESISTOR CH 3W 150	1	
R1033		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R1034		ERJ3GEYJ151	M.RESISTOR CH 3W 150	1	
R1035,36		ERJ3GEYJ681	M.RESISTOR CH 3W 680	2	
R1038		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R1039		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R1040		ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R1041		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R1042		VRE0034E123	M.RESISTOR CH 1/10W 12K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R1043		VRE0034E332	M.RESISTOR CH 1/10W 3.3K	1	
R1044		VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R1045		VRE0034E332	M.RESISTOR CH 1/10W 3.3K	1	
R1047		ERJ12YJ472	M.RESISTOR 1/2W 4.7K	1	
R1048		VRE0034E683	M.RESISTOR CH 1/10W 68K	1	
R1049		VRE0034E472	M.RESISTOR CH 1/10W 4.7K	1	
R1060		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R1061		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R1063		ERJ3GEYJ680	M.RESISTOR CH 3W 68	1	
R1074		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R1076		VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R1077		VRE0034E332	M.RESISTOR CH 1/10W 3.3K	1	
R1078,79		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	
R1084		ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	
R1088,89		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R1101		ERJ12YJ472	M.RESISTOR 1/2W 4.7K	1	
R1102		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R1113,14		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	2	
R1115-17		ERJ3GEYJ101	M.RESISTOR CH 3W 100	3	
R1118		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R1119		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R1120,21		ERJ3GEYJ151	M.RESISTOR CH 3W 150	2	
R1126-28		ERJ3GEYJ154	M.RESISTOR CH 3W 150K	3	
R1129		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R1137		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R2001		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R2002		ERJ3GEYJ154	M.RESISTOR CH 3W 150K	1	
R2003		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R2004		ERJ3GEYJ564	M.RESISTOR CH 3W 560K	1	
R2005		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R2006		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R2007		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R2008		ERJ3GEYJ474	M.RESISTOR CH 3W 470K	1	
R2009		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R2010		ERJ8GCYJ1R0	M.RESISTOR CH 1/8W 1.0	1	
R2011,12		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	2	
R2013		ERJ8GCYJR47	M.RESISTOR CH 1/8W 0.47	1	
R2014		ERJ8GCYJR33	M.RESISTOR CH 1/8W 0.33	1	
R2015		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R2016-18		ERJ3GEYJ682	M.RESISTOR CH 3W 6.8K	3	
R2019		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R2020		ERJ8GCYJ681	M.RESISTOR CH 1/8W 680	1	
R2021		ERJ8GCYJ1R0	M.RESISTOR CH 1/8W 1.0	1	
R2022		ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R2023		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R2024		ERJ3GEYJ153	M.RESISTOR CH 3W 15K	1	
R2025		ERJ3GEYJ474	M.RESISTOR CH 3W 470K	1	
R2026-29		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	4	
R2030		ERJ3GEYJ274	M.RESISTOR CH 3W 270K	1	
R2031		ERJ3GEYJ474	M.RESISTOR CH 3W 470K	1	
R2033		VRE0034E183	M.RESISTOR CH 1/10W 18K	1	
R2034		ERJ3GEYJ474	M.RESISTOR CH 3W 470K	1	
R2036		ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R2037		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R2038		ERJ3GEYJ184	M.RESISTOR CH 3W 180K	1	
R2040		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R2042,43		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	2	
R2044		ERJ3GEYJ564	M.RESISTOR CH 3W 560K	1	
R2045		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R2046		ERJ3GEYJ334	M.RESISTOR CH 3W 330K	1	
R2047		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R2049,50		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	2	
R2051		ERJ3GEYJ334	M.RESISTOR CH 3W 330K	1	
R2052		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R2053		ERJ3GEYJ5R6	M.RESISTOR CH 3W 5.6	1	
R2054		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R2056,57		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	
R2058		ERJ3GEYJ564	M.RESISTOR CH 3W 560K	1	
R2059		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R2060		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R2061		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R2062		ERJ6GEYJ820	M.RESISTOR CH1/16W 82	1	
R2063		ERJ8GCYJ681	M.RESISTOR CH 1/8W 680	1	
R2064		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R2065		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2066	ERJ8GCYJ1R0	M.RESISTOR CH 1/8W 1.0	1	
R2069	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R2071	ERJ6GEYJ221	M.RESISTOR CH1/16W 220	1	
R2073	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R2075	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R2076	ERJ3GEYJ184	M.RESISTOR CH 3W 180K	1	
R2077,78	ERJ3GEYJ823	M.RESISTOR CH 3W 82K	2	
R2079	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R2083	ERJ6GEYJ221	M.RESISTOR CH1/16W 220	1	
R2084	ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R2085	ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R2086	VRE0034E563	M.RESISTOR CH 1/10W 56K	1	
R2087	VRE0034E223	M.RESISTOR CH 1/10W 22K	1	
R2088	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R2089	ERJ3GEYJ394	M.RESISTOR CH 3W 390K	1	
R2090,91	ERJ3GEYJ104	M.RESISTOR CH 3W 100K	2	
R2092	ERJ3GEYJ334	M.RESISTOR CH 3W 330K	1	
R2093	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R2094	ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R2095	ERJ3GEYJ824	M.RESISTOR CH 3W 820K	1	
R2096	ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R2097,98	ERJ3GEYJ183	M.RESISTOR CH 3W 18K	2	
R2099	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
T1002	VTP0358	TRANSFORMER	1	
VR1001-06	EVM7JGA00B23	V.RESISTOR 2K	6	
	VEP03B01A	P.C.BOARD W/COMPONENT		
		VIDEO		
	VEP00U81A	P.C.BOARD W/COMPONENT		ON VEP03B01A
		VIDEO SUB		
		CAPACITORS		
C1	ECEV1AA221	E.CAPACITOR 10V 220U	1	
C2,C3	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C4	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C5	ECEV0JV330S	E.CAPACITOR 6.3V 33U	1	
C6	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3002	ECEV0GV470Q	E.CAPACITOR 4V 47U	1	
C3005	ECUX1H220JCV	C.CAPACITOR 50V 22P	1	
C3006	ECUX1H271JCV	C.CAPACITOR 50V 270P	1	
C3007	ECUX1H820JCV	C.CAPACITOR 50V 82P	1	
C3008	ECUX1H271JCV	C.CAPACITOR 50V 270P	1	
C3009	ECUX1H221JCV	C.CAPACITOR 50V 220P	1	
C3010	ECUX1H271JCV	C.CAPACITOR 50V 270P	1	
C3011,12	ECST1AY475Z	T.CAPACITOR 10V 4.7U	2	
C3013	ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3014	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3023	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3024	ECEV0JV101Q	E.CAPACITOR 6.3V 100U	1	
C3025,26	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3028	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3029	ECUX1H390JCV	C.CAPACITOR 50V 39P	1	
C3030	ECUX1H221JCV	C.CAPACITOR 50V 220P	1	
C3031	ECUX1H820JCV	C.CAPACITOR 50V 82P	1	
C3033,34	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	2	
C3036	ECUX1H270JCV	C.CAPACITOR 50V 27P	1	
C3037	ECUX1H390JCV	C.CAPACITOR 50V 39P	1	
C3042	ECUX1H560JCV	C.CAPACITOR 50V 56P	1	
C3043	ECUX1H220JCV	C.CAPACITOR 50V 22P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3045	ECUX1H150JCV	C.CAPACITOR 50V 15P	1	
C3047	ECST0JX156Z	T.CAPACITOR 6.3V 15U	1	
C3053	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3055	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3059	ECUX1H472KBV	C.CAPACITOR 50V 4700P	1	
C3061	ECUX1H120JCV	C.CAPACITOR 50V 12P	1	
C3062	ECUX1H390JCV	C.CAPACITOR 50V 39P	1	
C3065	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3071	ECUX1H680JCV	C.CAPACITOR 50V 68P	1	
C3072	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3075	ECEV0JA331P	E.CAPACITOR 6.3V 330U	1	
C3076	ECEV1EN4R7Q	E.CAPACITOR 25V 4.7U	1	
C3080	ECUX1H820JCV	C.CAPACITOR 50V 82P	1	
C3081	ECUX1H220JCV	C.CAPACITOR 50V 22P	1	
C3083	ECUX1H180JCV	C.CAPACITOR 50V 18P	1	
C3085	ECUX1H820JCV	C.CAPACITOR 50V 82P	1	
C3086	ECUX1H680JCV	C.CAPACITOR 50V 68P	1	
C3087	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3201	ECUX1H560JCV	C.CAPACITOR 50V 56P	1	
C3203	ECUX1H820JCV	C.CAPACITOR 50V 82P	1	
C3208	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3212	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3218	ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C3220	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3221	ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C3223	ECEV1EN4R7Q	E.CAPACITOR 25V 4.7U	1	
C3224	ECEV0JV470Q	E.CAPACITOR 6.3V 47U	1	
C3225	ECEV0JN100Q	E.CAPACITOR 6.3V 10U	1	
C3300	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3301	ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3305	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3306	ECEV0GV470Q	E.CAPACITOR 4V 47U	1	
C3307	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3308	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3309	ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3311-13	ECEV0JN470Q	E.CAPACITOR 6.3V 47U	3	
C3318	ECUX1H270JCV	C.CAPACITOR 50V 27P	1	
C3319,20	ECEV0JV330Q	E.CAPACITOR 6.3V 33U	2	
C3322	ECEV0JN470Q	E.CAPACITOR 6.3V 47U	1	
C3324	ECEV0JA331P	E.CAPACITOR 6.3V 330U	1	
C3325,26	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3327	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3328	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3330	ECUX1H271JCV	C.CAPACITOR 50V 270P	1	
C3331	ECUX1H391JCV	C.CAPACITOR 50V 390P	1	
C3333	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3334	ECUX1H150JCV	C.CAPACITOR 50V 15P	1	
C3335	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3336	ECUX1H680JCV	C.CAPACITOR 50V 68P	1	
C3337	ECUX1H271JCV	C.CAPACITOR 50V 270P	1	
C3338	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
C3339	ECUX1H221JCV	C.CAPACITOR 50V 220P	1	
C3340	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3341	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3342	ECEV1CV470Q	E.CAPACITOR 16V 47U	1	
C3347	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3348	ECEV1CV470Q	E.CAPACITOR 16V 47U	1	
C3352,53	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3354	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3355	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C5001	ECEV0GV470Q	E.CAPACITOR 4V 47U	1	
C5002,03	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	2	
C5004-11	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	8	
C5012-15	ECUX1H220JCV	C.CAPACITOR 50V 22P	4	
C5016-23	ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	8	
C5024	ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C5025-27	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	3	
C5028	ECUM1H273KBN	C.CAPACITOR CH 50V 0.027U	1	
C5029	ECUX1H822KBV	C.CAPACITOR 50V 8200P	1	
C5030,31	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	2	
C5032	ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C5033	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C5034	ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C5035	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C5036-39	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	4	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C5040-43		ECUX1H121JCV	C.CAPACITOR 50V 120P	4	
C5044-47		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	4	
C5048-51		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	4	
C5052		ECUX1H121JCV	C.CAPACITOR 50V 120P	1	
C5053		ECUX1H151JCV	C.CAPACITOR 50V 150P	1	
C5054		ECUX1H270JCV	C.CAPACITOR 50V 27P	1	
C5055,56		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C5062-65		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	4	
C5066		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C5067		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C5072		ECUM1H123KBV	C.CAPACITOR CH 50V 0.012U	1	
C5073		ECUM1E683KBN	C.CAPACITOR CH 25V 0.068U	1	
C5080		ECEV0GV470Q	E.CAPACITOR 4V 47U	1	
C5081		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C5082		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C5083		ECEV0JV470Q	E.CAPACITOR 6.3V 47U	1	
C5084		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C5085		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C5086		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C5087		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C5088		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C8001		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C8002		ECUX1H390JCV	C.CAPACITOR 50V 39P	1	
C8003		ECUX1H100DCV	C.CAPACITOR 50V 10P	1	
C8004		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C8005		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C8015		ECUX1H151JCV	C.CAPACITOR 50V 150P	1	
C8016		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C8017		ECEV0JA331P	E.CAPACITOR 6.3V 330U	1	
C8018		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C8040		ECUX1H390JCV	C.CAPACITOR 50V 39P	1	
C8048		ECUX1H332KBV	C.CAPACITOR 50V 3300P	1	
C8049		ECEV1EV4R7Q	E.CAPACITOR 25V 4.7U	1	
C8062,63		ECUX1H181JCV	C.CAPACITOR 50V 180P	2	
C8065		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C8066		ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
C8068		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C8071		ECUX1H182KBV	C.CAPACITOR 50V 1800P	1	
C8072		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C8074		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C8076		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C8081		ECUX1H820JCV	C.CAPACITOR 50V 82P	1	
C8101		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C8102		ECUX1H390JCV	C.CAPACITOR 50V 39P	1	
C8103		ECUX1H030CCV	C.CAPACITOR 50V 3P	1	
C8104		ECUX1H331JCV	C.CAPACITOR 50V 330P	1	
C8105		ECUX1H470JCV	C.CAPACITOR 50V 47P	1	
C8106		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C8109		ECUX1H680JCV	C.CAPACITOR 50V 68P	1	
C8110-12		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	3	
C8113		ECUX1H331JCV	C.CAPACITOR 50V 330P	1	
C8115		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C8116,17		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C8119		ECUX1H121JCV	C.CAPACITOR 50V 120P	1	
C8120		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C8301,02		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	2	
C8304		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C8305		ECEV1EN4R7Q	E.CAPACITOR 25V 4.7U	1	
C8306		ECUX1H271JCV	C.CAPACITOR 50V 270P	1	
C8307		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C8308		ECUX1H180JCV	C.CAPACITOR 50V 18P	1	
C8309,10		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	2	
C8311		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C8312		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C8320		ECUX1H100DCV	C.CAPACITOR 50V 10P	1	
C8321		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C8323		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C8401,02		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	2	
CN3001		VJP3507A080	CONNECTOR (MALE)	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D3201,02		MA729	DIODE	2	<R>
D5001		MA159	DIODE	1	<R>
D5002		MA142WA	DIODE	1	<R>
D5003		MA159	DIODE	1	<R>
D5004		MA142WA	DIODE	1	<R>
D5005		MA143	DIODE	1	<R>
D5006-09		MA728	DIODE	4	<R>
D8001		MA142WK	DIODE	1	<R>
D8301		MA142WK	DIODE	1	<R>
DL3001		ELB4C559	DELAY	1	
DL3002		ELB4D553	DELAY	1	
DL8401		VLD0151	DELAY	1	
FL3001,02		VLF0941C223	FILTER	2	
FL8001		VLF0941C223	FILTER	1	
IC1		AN77L05M	IC	1	<R>
IC2		XC62AP3502ML	IC	1	<R>
IC3001		VEFH25C	FIC	1	<R>
IC3002		TL8837F	IC	1	<R>
IC3003		AN3298NSB	IC	1	<R>
IC3004		NJM2207M	IC	1	<R>
IC3007		MC14577BF	IC	1	<R>
IC3008		XC62AP3502ML	IC	1	<R>
IC3010		MC14577BF	IC	1	<R>
IC3011,12		TC4W53F	IC	2	<R>
IC3013		MC14577BF	IC	1	<R>
IC5001		AN3350FHP	IC	1	<R>
IC8001		VEFH26E	FIC	1	<R>
IC8002		TL8832F	IC	1	<R>
IC8003		TC4W53F	IC	1	<R>
IC8301		AN3497SB	IC	1	<R>
L3001		VLQ0319K101	COIL 100UH	1	
L3003		VLQ0163J820	COIL 82UH	1	
L3004		VLQ0319F150	COIL 15UH	1	
L3010		VLQ0426J470	COIL 47UH	1	
L3011		VLQ0163J120	COIL 12UH	1	
L3012		VLQ0426J100	COIL 10UH	1	
L3015		VLQ0426J680	COIL 68UH	1	
L3017		VLQ0426J560	COIL 56UH	1	
L3018,19		VLQ0319K101	COIL 100UH	2	
L3020		VLQ0163J820	COIL 82UH	1	
L3021		VLQ0426J330	COIL 33UH	1	
L3025		VLQ0426J6R8	COIL 6.8UH	1	
L3030		VLQ0426J330	COIL 33UH	1	
L3032		VLQ0319K101	COIL 100UH	1	
L3034		VLQ0319K101	COIL 100UH	1	
L3035,36		VLQ0319K221	COIL 220UH	2	
L3037		VLQ0163J151	COIL 150UH	1	
L3039		VLQ0163J4R7	COIL 4.7UH	1	
L3040		VLQ0163J151	COIL 150UH	1	
L3042		VLQ0426J390	COIL 39UH	1	
L3043		VLQ0426J330	COIL 33UH	1	
L3044		VLQ0163J221	COIL 220UH	1	
L3045		VLQ0163J820	COIL 82UH	1	
L3046		VLQ0163J221	COIL 220UH	1	
L3047,48		VLQ0319K101	COIL 100UH	2	
L5001-03		VLQ0319F150	COIL 15UH	3	
L5004		VLQ0319K101	COIL 100UH	1	
L5005		VLQ0163J120	COIL 12UH	1	
L5006-08		VLQ0319F150	COIL 15UH	3	
L8001		VLQ0426J390	COIL 39UH	1	
L8003		VLQ0426J6R8	COIL 6.8UH	1	
L8004		VLQ0319K101	COIL 100UH	1	
L8006		VLQ0426J820	COIL 82UH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L8007		VLQ0319K221	COIL 220UH	1	
L8012		VLQ0319K101	COIL 100UH	1	
L8013		VLQ0163J181	COIL 180UH	1	
L8014		VLQ0319K151	COIL 150UH	1	
L8015		VLQ0319F150	COIL 15UH	1	
L8016		VLQ0133J471	COIL 470UH	1	
L8018		VLQ0319K151	COIL 150UH	1	
L8301		VLQ0319K101	COIL 100UH	1	
L8401,02		VLQ0163J150	COIL 15UH	2	
P3010		VJP3125B006	CONNECTOR (MALE)	1	
P3011		VJP3358A012	CONNECTOR (MALE)	1	
P5002		VJS2958B023	CONNECTOR (FEMALE)	1	
Q1		UN2213	TRANSISTOR	1	<R>
Q3001		2SB970X	TRANSISTOR	1	<R>
Q3006		2SD1819A-R	TRANSISTOR	1	<R>
Q3008-10		2SC3931-CD	TRANSISTOR	3	<R>
Q3012		2SD1819A-R	TRANSISTOR	1	<R>
Q3014		2SB1218A	TRANSISTOR	1	<R>
Q3016		2SD1819A-R	TRANSISTOR	1	<R>
Q3017		2SB1218A	TRANSISTOR	1	<R>
Q3022		2SB970X	TRANSISTOR	1	<R>
Q3025,26		2SD1819A-R	TRANSISTOR	2	<R>
Q3027,28		2SC3931-CD	TRANSISTOR	2	<R>
Q3029		2SD1819A-R	TRANSISTOR	1	<R>
Q3030		2SB1218A	TRANSISTOR	1	<R>
Q3031		2SD1819A-R	TRANSISTOR	1	<R>
Q3032		2SC3931-CD	TRANSISTOR	1	<R>
Q3033		2SB1218A	TRANSISTOR	1	<R>
Q3040-42		2SD1819A-R	TRANSISTOR	3	<R>
Q3043		2SB1218A	TRANSISTOR	1	<R>
Q3045		2SD1819A-R	TRANSISTOR	1	<R>
Q3046,47		2SB1218A	TRANSISTOR	2	<R>
Q3048		2SD1819A-R	TRANSISTOR	1	<R>
Q3049		2SD1754APY	TRANSISTOR	1	<R>
Q5001,02		XN4504	TRANSISTOR	2	<R>
Q5003		2SB970X	TRANSISTOR	1	<R>
Q5004,05		2SA812	TRANSISTOR	2	<R>
Q5006,07		XN4504	TRANSISTOR	2	<R>
Q5008,09		2SD1328-R	TRANSISTOR	2	<R>
Q5010,11		2SB970X	TRANSISTOR	2	<R>
Q8001,02		2SD1819A-R	TRANSISTOR	2	<R>
Q8009		2SB1218A	TRANSISTOR	1	<R>
Q8013		2SB1218A	TRANSISTOR	1	<R>
Q8014,15		2SD1819A-R	TRANSISTOR	2	<R>
Q8016		2SC3931-CD	TRANSISTOR	1	<R>
Q8017,18		2SD1819A-R	TRANSISTOR	2	<R>
Q8019		2SB1218A	TRANSISTOR	1	<R>
Q8020		2SC3931-CD	TRANSISTOR	1	<R>
Q8021		2SD1819A-R	TRANSISTOR	1	<R>
Q8022		2SB1218A	TRANSISTOR	1	<R>
Q8023		2SC3938-QR	TRANSISTOR	1	<R>
Q8301,02		2SD1819A-R	TRANSISTOR	2	<R>
Q8304		2SB1218A	TRANSISTOR	1	<R>
Q8401		2SD1819A-R	TRANSISTOR	1	<R>
QR3001		UN5212	TRANSISTOR-RESISTOR	1	<R>
QR3003		UN5212	TRANSISTOR-RESISTOR	1	<R>
QR3009		UN5212	TRANSISTOR-RESISTOR	1	<R>
QR3013,14		UN5212	TRANSISTOR-RESISTOR	2	<R>
QR3016		UN5212	TRANSISTOR-RESISTOR	1	<R>
QR3018-20		UN5212	TRANSISTOR-RESISTOR	3	<R>
QR3021		UN5113	TRANSISTOR-RESISTOR	1	<R>
QR3022		UN5211	TRANSISTOR-RESISTOR	1	<R>
QR3023		UN5213	TRANSISTOR	1	<R>
QR5001		UN5213	TRANSISTOR	1	<R>
QR5002		UN5212	TRANSISTOR-RESISTOR	1	<R>
QR5004		XP1213	TRANSISTOR-RESISTOR	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR5005		UN5212	TRANSISTOR-RESISTOR	1	<R>
QR5006		UN5213	TRANSISTOR	1	<R>
QR5007		UN5211	TRANSISTOR-RESISTOR	1	<R>
QR5008,09		UN5213	TRANSISTOR	2	<R>
			RESISTORS		
R1		ERJ6GEYJ560	M.RESISTOR CH1/16W 56	1	
R2		ERJ6GEYJ103	M.RESISTOR CH1/16W 10K	1	
R3		ERJ6GEYJ681	M.RESISTOR CH1/16W 680	1	
R4		ERJ6GEYJ101	M.RESISTOR CH1/16W 100	1	
R3001		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R3002		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R3003,04		VRE0034E102	M.RESISTOR CH 1/10W 1K	2	
R3005		VRE0034E471	M.RESISTOR CH 1/10W 470	1	
R3006		VRE0034E332	M.RESISTOR CH 1/10W 3.3K	1	
R3007		VRE0034E152	M.RESISTOR CH 1/10W 1.5K	1	
R3008		VRE0034E332	M.RESISTOR CH 1/10W 3.3K	1	
R3024		ERJ3GEYJ821	M.RESISTOR CH 3W 820	1	
R3025		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3026		ERJ3GEYJ182	M.RESISTOR CH 3W 1.8K	1	
R3028		ERJ3GEYJ273	M.RESISTOR CH 3W 27K	1	
R3030		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R3031		ERJ3GEYJ391	M.RESISTOR CH 3W 390	1	
R3033		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3036		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R3037		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3041		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R3042		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3044		ERJ3GEYJ821	M.RESISTOR CH 3W 820	1	
R3045,46		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	2	
R3047		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R3049		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3055		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R3064		ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R3068,69		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	2	
R3070		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3071		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3072		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3073		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R3074		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3075		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R3076		ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3077		ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3079		ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3080		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R3090		ERJ3GEYJ153	M.RESISTOR CH 3W 15K	1	
R3091		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R3098		ERJ3GEYJ474	M.RESISTOR CH 3W 470K	1	
R3103		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R3104		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3109		ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3110		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3113		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3117		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3127		ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R3128		ERJ3GEYJ474	M.RESISTOR CH 3W 470K	1	
R3136		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3139		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3142		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3157		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R3160		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R3201		ERJ3GEYJ562	M.RESISTOR CH 3W 5.6K	1	
R3203		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R3226		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3227		ERJ3GEYJ681	M.RESISTOR CH 3W 680	1	
R3241		ERJ3GEYJ474	M.RESISTOR CH 3W 470K	1	
R3242		ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3243		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3244		ERJ3GEYJ181	M.RESISTOR CH 3W 180	1	
R3245		ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R3246		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R3247		ERJ3GEYJ822	M.RESISTOR CH 3W 8.2K	1	
R3251		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3252		ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3253		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R3254		ERJ3GEYJ153	M.RESISTOR CH 3W 15K	1	
R3255		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R3256		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R3257		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3259		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3260		ERJ3GEYJ270	M.RESISTOR CH 3W 27	1	
R3261		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R3262		ERJ3GEYJ682	M.RESISTOR CH 3W 6.8K	1	
R3263		ERJ3GEYJ270	M.RESISTOR CH 3W 27	1	
R3264		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R3265,66		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	2	
R3267		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R3271,72		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	2	
R3276,77		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	2	
R3278,79		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	2	
R3304		ERJ3GEYJ100	M.RESISTOR CH 3W 10	1	
R3305		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3316		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3317		ERJ3GEYJ153	M.RESISTOR CH 3W 15K	1	
R3318		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3319		ERJ3GEYJ221	M.RESISTOR CH 3W 220	1	
R3320		ERJ3GEYJ153	M.RESISTOR CH 3W 15K	1	
R3321		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3322		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R3323		ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3324,25		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	
R3326		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3327		ERJ3GEYJ151	M.RESISTOR CH 3W 150	1	
R3328		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R3330		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3341		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3342		ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	
R3343		ERJ3GEYJ182	M.RESISTOR CH 3W 1.8K	1	
R3344		ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	
R3345		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3346		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R3347		ERJ3GEYJ681	M.RESISTOR CH 3W 680	1	
R3348		ERJ3GEYJ391	M.RESISTOR CH 3W 390	1	
R3349		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R3350		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3352		ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3353		ERJ3GEYJ221	M.RESISTOR CH 3W 220	1	
R3355,56		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	2	
R3357		ERJ3GEYJ331	M.RESISTOR CH 3W 330	1	
R3358		ERJ3GEYJ681	M.RESISTOR CH 3W 680	1	
R3360		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3361		ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3364		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3365,66		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	2	
R3367,68		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	2	
R3370,71		ERJ3GEYJ561	M.RESISTOR CH 3W 560	2	
R3373,74		ERJ3GEYJ561	M.RESISTOR CH 3W 560	2	
R3375,76		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	2	
R3377		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R3381		ERJ3GEYJ562	M.RESISTOR CH 3W 5.6K	1	
R3382,83		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	
R3384		ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	
R3389		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R5001		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R5002		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R5003		ERJ3GEYJ822	M.RESISTOR CH 3W 8.2K	1	
R5004-07		ERJ3GEYJ471	M.RESISTOR CH 3W 470	4	
R5008-11		ERJ3GEYJ821	M.RESISTOR CH 3W 820	4	
R5012		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R5013		ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R5014		ERJ3GEYJ821	M.RESISTOR CH 3W 820	1	
R5015		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R5016-19		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	4	
R5020-23		ERJ3GEYJ391	M.RESISTOR CH 3W 390	4	
R5024		ERJ6GEYJ4R7	M.RESISTOR CH1/16W 4.7	1	
R5025		ERJ3GEYJ391	M.RESISTOR CH 3W 390	1	
R5026		ERJ3GEYJ181	M.RESISTOR CH 3W 180	1	
R5027		ERJ3GEYJ822	M.RESISTOR CH 3W 8.2K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R5028		ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R5029,30		ERJ3GEYJ100	M.RESISTOR CH 3W 10	2	
R5031		ERJ3GEYJ394	M.RESISTOR CH 3W 390K	1	
R5032		ERJ3GEYJ184	M.RESISTOR CH 3W 180K	1	
R5033,34		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	2	
R5035		ERJ3GEYJ391	M.RESISTOR CH 3W 390	1	
R5036		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R5037		ERJ3GEYJ394	M.RESISTOR CH 3W 390K	1	
R5038		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R5039		ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R5040-42		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	3	
R5043-45		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	3	
R5046-48		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	3	
R5049		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R5050		ERJ3GEYJ474	M.RESISTOR CH 3W 470K	1	
R5051		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R5052		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R5066-71		ERJ3GEYJ394	M.RESISTOR CH 3W 390K	6	
R5074		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R5075		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R5076		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R5077		ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R5078		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R5079		ERJ3GEYJ562	M.RESISTOR CH 3W 5.6K	1	
R5080		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R8003		ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R8014,15		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	
R8016		ERJ3GEYJ182	M.RESISTOR CH 3W 1.8K	1	
R8017		ERJ3GEYJ681	M.RESISTOR CH 3W 680	1	
R8044		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R8045		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R8054		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R8055		ERJ3GEYJ124	M.RESISTOR CH 3W 120K	1	
R8056		ERJ3GEYJ822	M.RESISTOR CH 3W 8.2K	1	
R8057,58		ERJ3GEYJ474	M.RESISTOR CH 3W 470K	2	
R8062		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R8067		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R8070		ERJ3GEYJ681	M.RESISTOR CH 3W 680	1	
R8071		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R8072		ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R8073		ERJ3GEYJ682	M.RESISTOR CH 3W 6.8K	1	
R8074		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R8090		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R8091		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R8092		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R8093		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R8094		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R8095		ERJ3GEYJ331	M.RESISTOR CH 3W 330	1	
R8097		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R8099,00		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	2	
R8112		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R8114		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R8115		ERJ3GEYJ822	M.RESISTOR CH 3W 8.2K	1	
R8116		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R8117		ERJ3GEYJ182	M.RESISTOR CH 3W 1.8K	1	
R8118,19		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	
R8120,21		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	2	
R8122		ERJ3GEYJ182	M.RESISTOR CH 3W 1.8K	1	
R8123		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R8124		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R8125		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R8126		ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	
R8127		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R8128		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R8129		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R8130		ERJ3GEYJ181	M.RESISTOR CH 3W 180	1	
R8131-33		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	3	
R8134		ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R8135		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R8136		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R8137		ERJ3GEYJ391	M.RESISTOR CH 3W 390	1	
R8138		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R8142		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R8143		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R8144		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R8145		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R8146,47		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R8148		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R8149		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R8150		ERJ3GEYJ182	M.RESISTOR CH 3W 1.8K	1	
R8155		ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	
R8301		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R8302		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R8303		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R8304,05		ERJ3GEYJ471	M.RESISTOR CH 3W 470	2	
R8306		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R8307		ERJ3GEYJ681	M.RESISTOR CH 3W 680	1	
R8308		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R8309		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R8310		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R8311		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R8313		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R8316		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R8401,02		ERJ3GEYJ561	M.RESISTOR CH 3W 560	2	
R8403		ERJ3GEYJ273	M.RESISTOR CH 3W 27K	1	
R8404		ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R8405		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
VR1		EVM7JGA00B22	V.RESISTOR 200	1	
VR3002,03		EVM7JGA00B13	V.RESISTOR 1K	2	
VR3004		EVM7JGA00B14	V.RESISTOR 10K	1	
VR3005		EVM7JGA00B23	V.RESISTOR 2K	1	
VR3006		EVM7JGA00B14	V.RESISTOR 10K	1	
VR3007		EVM7JGA00B54	V.RESISTOR 50K	1	
VR3009		EVM7JGA00B53	V.RESISTOR 5K	1	
VR3010		EVM7JGA00B13	V.RESISTOR 1K	1	
VR3011		EVM7JGA00B23	V.RESISTOR 2K	1	
VR3012-14		EVM7JGA00B13	V.RESISTOR 1K	3	
VR8002		EVM7JGA00B23	V.RESISTOR 2K	1	
VR8003,04		EVM7JGA00B54	V.RESISTOR 50K	2	
VR8006,07		EVM7JGA00B33	V.RESISTOR 3K	2	
VR8301		EVM7JGA00B52	V.RESISTOR 500	1	
VR8302		EVM7JGA00B13	V.RESISTOR 1K	1	
VR8303		EVM7JGA00B53	V.RESISTOR 5K	1	
X8001		VSX0375	CRYSTAL OSCILLATOR	1	<R>
		VEP04442B	P.C.BOARD W/COMPONENT		
			AUDIO & SYSCON		
			CAPACITORS		
C4101,02		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	2	
C4103		ECEV0JV220Q	E.CAPACITOR 6.3V 22U	1	
C4104,05		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4106		ECST1AY106Z	T.CAPACITOR 10V 10U	1	
C4107		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C4108		ECEV0JV220Q	E.CAPACITOR 6.3V 22U	1	
C4109		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C4110		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4111,12		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4113		ECHU1H152JB5	P.CAPACITOR 50V 1500P	1	
C4114,15		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4117		ECEV1EV220Q	E.CAPACITOR 25V 22U	1	
C4118		ECHU1C103JB5	P.CAPACITOR 16V 0.01U	1	
C4119,20		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4121		ECHU1C822JB5	P.CAPACITOR 16V 8200P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4122		ECHU1C103JB5	P.CAPACITOR 16V 0.01U	1	
C4123		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4124		ECEV1CV470Q	E.CAPACITOR 16V 47U	1	
C4125		ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C4126		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C4127		ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C4129		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4130		ECST1VY684Z	T.CAPACITOR 35V 0.68U	1	
C4131		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4134		VCC0039	C.CAPACITOR	1	
C4135		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C4201,02		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	2	
C4203		ECEV0JV220Q	E.CAPACITOR 6.3V 22U	1	
C4204,05		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4206		ECST1AY106Z	T.CAPACITOR 10V 10U	1	
C4207		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C4208		ECEV0JV220Q	E.CAPACITOR 6.3V 22U	1	
C4209		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C4210		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4211,12		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4213		ECHU1H152JB5	P.CAPACITOR 50V 1500P	1	
C4214,15		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4217		ECEV1EV220Q	E.CAPACITOR 25V 22U	1	
C4218		ECHU1C103JB5	P.CAPACITOR 16V 0.01U	1	
C4219,20		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4221		ECHU1C822JB5	P.CAPACITOR 16V 8200P	1	
C4222		ECHU1C103JB5	P.CAPACITOR 16V 0.01U	1	
C4223		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4224		ECEV1CV470Q	E.CAPACITOR 16V 47U	1	
C4225		ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C4226		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C4227		ECEV0JN220Q	E.CAPACITOR 6.3V 22U	1	
C4228		ECEV0JV470Q	E.CAPACITOR 6.3V 47U	1	
C4229		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4230		ECST1VY684Z	T.CAPACITOR 35V 0.68U	1	
C4231		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4232,33		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4234		VCC0039	C.CAPACITOR	1	
C4235		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C4302		ECEV1EN4R7Q	E.CAPACITOR 25V 4.7U	1	
C4303		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C4304		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C4305		ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
C4306		ECHU1C682JB5	P.CAPACITOR 16V 6800P	1	
C4307		ECHU1C223JB5	P.CAPACITOR 16V 0.022U	1	
C4308		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4309		ECEV1EV4R7Q	E.CAPACITOR 25V 4.7U	1	
C4310		ECHU1C223JB5	P.CAPACITOR 16V 0.022U	1	
C4311		ECEV0JV470Q	E.CAPACITOR 6.3V 47U	1	
C4312		ECHU1C103JB5	P.CAPACITOR 16V 0.01U	1	
C4313		ECUX1H332KBV	C.CAPACITOR 50V 3300P	1	
C4314		ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
C4315		ECUX1H122KBV	C.CAPACITOR 50V 1200P	1	
C4316		ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
C4317		ECEV1EN4R7Q	E.CAPACITOR 25V 4.7U	1	
C4319		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C4320		ECUX1H101JCV	C.CAPACITOR 50V 100P	1	
C4321,22		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	2	
C4323		ECUX1H330JCV	C.CAPACITOR 50V 33P	1	
C4324		ECUX1H181JCV	C.CAPACITOR 50V 180P	1	
C4325		ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
C4326		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C4327		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4328		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C4329		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C4331		ECEV1EN4R7Q	E.CAPACITOR 25V 4.7U	1	
C4332		ECUX1H152KBV	C.CAPACITOR 50V 1500P	1	
C4402		ECEV1EN4R7Q	E.CAPACITOR 25V 4.7U	1	
C4403		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C4404		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C4405		ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
C4406		ECHU1C682JB5	P.CAPACITOR 16V 6800P	1	
C4407		ECHU1C223JB5	P.CAPACITOR 16V 0.022U	1	
C4408		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4409		ECEV1EV4R7Q	E.CAPACITOR 25V 4.7U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4410		ECHU1C223JB5	P.CAPACITOR 16V 0.022U	1	
C4411		ECEV0JV470Q	E.CAPACITOR 6.3V 47U	1	
C4412		ECHU1C103JB5	P.CAPACITOR 16V 0.01U	1	
C4413		ECUX1H332KBV	C.CAPACITOR 50V 3300P	1	
C4414		ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
C4415		ECUX1H122KBV	C.CAPACITOR 50V 1200P	1	
C4416		ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
C4417		ECEV1EN4R7Q	E.CAPACITOR 25V 4.7U	1	
C4419		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C4420		ECUX1H101JCV	C.CAPACITOR 50V 100P	1	
C4421,22		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	2	
C4423		ECUX1H220JCV	C.CAPACITOR 50V 22P	1	
C4425		ECUX1H471JCV	C.CAPACITOR 50V 470P	1	
C4426		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C4427		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4428		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C4429		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C4431		ECEV1EN4R7Q	E.CAPACITOR 25V 4.7U	1	
C4432		ECUX1H152KBV	C.CAPACITOR 50V 1500P	1	
C4501		ECEV1CV470Q	E.CAPACITOR 16V 47U	1	
C4502		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C4503		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C4504		ECEV0JV470Q	E.CAPACITOR 6.3V 47U	1	
C4505		ECEV1CV470Q	E.CAPACITOR 16V 47U	1	
C4506		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C4507		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4508		ECEV0JV101Q	E.CAPACITOR 6.3V 100U	1	
C4509		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C4510		ECEV1CV470Q	E.CAPACITOR 16V 47U	1	
C4511,12		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4513		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C4514		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C4515		ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
C4516		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4517		VCC0040	C.CAPACITOR	1	
C4518		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C4519		ECEV0JA331P	E.CAPACITOR 6.3V 330U	1	
C4520		ECEV0JV101Q	E.CAPACITOR 6.3V 100U	1	
C4521		ECEV1EV4R7Q	E.CAPACITOR 25V 4.7U	1	
C4601		ECEV1CV470Q	E.CAPACITOR 16V 47U	1	
C4602		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C4603		ECEV0JV470Q	E.CAPACITOR 6.3V 47U	1	
C4607		ECUX1H331JCV	C.CAPACITOR 50V 330P	1	
C4608		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4609,10		ECHU1C104J	P.CAPACITOR 16V 0.1U	2	
C4611		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C4612		ECEV0JV101Q	E.CAPACITOR 6.3V 100U	1	
C4613		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C4614,15		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	2	
C4616		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4617-19		ECEV1CV470Q	E.CAPACITOR 16V 47U	3	
C4620		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4621		ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C4622		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C4623		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C4624		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C4625		ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C4626		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C4627		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C4628		ECUX1H050CCV	C.CAPACITOR 50V 5P	1	
C4629		ECHU1C683JB5	P.CAPACITOR 16V 0.068U	1	
C4701,02		ECEV0JV470Q	E.CAPACITOR 6.3V 47U	2	
C4703		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C4704		ECUX1H822KBV	C.CAPACITOR 50V 8200P	1	
C4705		ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
C4706		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C4707		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C6002		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C6003		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C6004		ECUX1H120JCV	C.CAPACITOR 50V 12P	1	
C6005,06		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C6010		ECUM1H273KBN	C.CAPACITOR CH 50V 0.027U	1	
C6011		ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
C6014		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C6017		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C6018,19		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	2	
C6020,21		ECEV1CV100Q	E.CAPACITOR 16V 10U	2	
C6022		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C6024		ECUX1H561JCV	C.CAPACITOR 50V 560P	1	
C6025		ECUX1H120JCV	C.CAPACITOR 50V 12P	1	
C6026-28		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	3	
C6031		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C6032		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C6035		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C6036		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C6037		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C6038		ECEV1CV470Q	E.CAPACITOR 16V 47U	1	
C6040		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C6042		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C6501,02		ECUX1H330JCV	C.CAPACITOR 50V 33P	2	
C6503-05		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	3	
C6506		ECUX1H220JCV	C.CAPACITOR 50V 22P	1	
C6508		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C6509		ECUX1H330JCV	C.CAPACITOR 50V 33P	1	
C6511		ECUX1H050CCV	C.CAPACITOR 50V 5P	1	
C6512		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C6514		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C6516-22		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	7	
C6523		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C6524		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C6525		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C6527-30		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	4	
C6531,32		ECUX1H221JCV	C.CAPACITOR 50V 220P	2	
C6534-37		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	4	
C6801		ECUX1H060DCV	C.CAPACITOR 50V 6P	1	
C6803		ECUX1H050CCV	C.CAPACITOR 50V 5P	1	
C6804		ECUX1H270JCV	C.CAPACITOR 50V 27P	1	
C6805		ECUX1H180JCV	C.CAPACITOR 50V 18P	1	
C6806-11		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	6	
C6812,13		ECUX1H100DCV	C.CAPACITOR 50V 10P	2	
C6814		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C6815		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C6816		ECEV1CV100Q	E.CAPACITOR 16V 10U	1	
C6817		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C6818		ECEV0JV470Q	E.CAPACITOR 6.3V 47U	1	
C6819		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C6820		ECEV0JV470Q	E.CAPACITOR 6.3V 47U	1	
C6822		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C6826		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C6827		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C6828		ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
CN6001		VJP3507A080	CONNECTOR (MALE)	1	
D4101,02		MA728	DIODE	2	<R>
D4201,02		MA728	DIODE	2	<R>
D4301		MA143	DIODE	1	<R>
D4401		MA143	DIODE	1	<R>
D4501		MA142WA	DIODE	1	<R>
D4502		MA143	DIODE	1	<R>
D4503		MA141K	DIODE	1	<R>
D4601		MA143	DIODE	1	<R>
D4602,03		MA142WK	DIODE	2	<R>
D4604,05		MA141K	DIODE	2	<R>
D4701		MA143	DIODE	1	<R>
D6001		MA141K	DIODE	1	<R>
D6003,04		MA141K	DIODE	2	<R>
D6006,07		MA141K	DIODE	2	<R>
D6504		MA728	DIODE	1	<R>
D6506-08		MA728	DIODE	3	<R>
D6511-14		MA728	DIODE	4	<R>
D6515		MA143	DIODE	1	<R>
D6801,02		MA141K	DIODE	2	<R>
D6803		MA8024	DIODE	1	<R>
D6804		MA143	DIODE	1	<R>

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
FL4101	VLF1069	FILTER	1	
FL4102	VLF1070	FILTER	1	
FL4201	VLF1069	FILTER	1	
FL4202	VLF1070	FILTER	1	
FL4301	VLF0944	FILTER	1	
FL4401	VLF0945	FILTER	1	
FL4501	VLT0729	FILTER	1	
IC4101	LA7285M	IC	1	<R>
IC4102	UPC4558G2	IC	1	<R>
IC4201	LA7285M	IC	1	<R>
IC4202	UPC4558G2	IC	1	<R>
IC4501	UPC5021GA069	IC	1	<R>
IC4502	CXA1102M	IC	1	<R>
IC4503	MC14053BF	IC	1	<R>
IC4601	BA7703K1	IC	1	<R>
IC4602	NJM2123V	IC	1	<R>
IC4603	UPC4558G2	IC	1	<R>
IC4604	MC14577BF	IC	1	<R>
IC4701	UPC4558G2	IC	1	<R>
IC6001	VSI1507B	IC	1	<R>
IC6002	MN12821	IC	1	<R>
IC6004	UPC393G2	IC	1	<R>
IC6501	VSI1424A	IC	1	<R>
IC6502	S8420BF	IC	1	<R>
IC6503	UPD6456T611Y	IC	1	<R>
IC6505	TC7W04F	IC	1	<R>
IC6506	TC7S08F	IC	1	<R>
IC6801	MN51040VPI	IC	1	<R>
IC6803	UPC319G2	IC	1	<R>
IC6804	UPC393G2	IC	1	<R>
L4101	VLQ0423J153	COIL 0.015H	1	
L4201	VLQ0423J153	COIL 0.015H	1	
L4301	VLQ0319K101	COIL 100UH	1	
L4401	VLQ0319K101	COIL 100UH	1	
L4402	VLQ0426J560	COIL 56UH	1	
L4502,03	VLQ0319K101	COIL 100UH	2	
L4601	VLQ0319K101	COIL 100UH	1	
L4602	MA178	DIODE	1	
L4603,04	VLQ0319K101	COIL 100UH	2	
L4701	VLQ0319K470	COIL 47UH	1	
L6001	VLQ0319K470	COIL 47UH	1	
L6002	VLQ0319K100	COIL 10UH	1	
L6003	VLQ0319K470	COIL 47UH	1	
L6502	VLQ0163J330	COIL 33UH	1	
L6801	VLQ0163J221	COIL 220UH	1	
L6802	VLQ0163J470	COIL 47UH	1	
L6803	VLQ0319K101	COIL 100UH	1	
P4001	VJS2959B010	CONNECTOR (FEMALE)	1	
P6002-04	VJS3406D026	CONNECTOR (FEMALE)	3	
Q4101-04	2SD1819A-R	TRANSISTOR	4	<R>
Q4105,06	2SD1824	TRANSISTOR	2	<R>
Q4107	2SB1220-QR	TRANSISTOR	1	<R>
Q4108	2SB1219AQR	TRANSISTOR	1	<R>
Q4201-04	2SD1819A-R	TRANSISTOR	4	<R>
Q4205,06	2SD1824	TRANSISTOR	2	<R>
Q4207	2SB1220-QR	TRANSISTOR	1	<R>
Q4208	2SB1219AQR	TRANSISTOR	1	<R>
Q4301	2SD1979	TRANSISTOR	1	<R>
Q4401	2SD1979	TRANSISTOR	1	<R>
Q4501,02	2SB970X	TRANSISTOR	2	<R>
Q4503	2SD874-R	TRANSISTOR	1	<R>

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q4504	2SD1819A-R	TRANSISTOR	1	<R>
Q4601	2SD1819A-R	TRANSISTOR	1	<R>
Q4603	2SB1219AQR	TRANSISTOR	1	<R>
Q4604	2SD1819A-R	TRANSISTOR	1	<R>
Q4605,06	2SB970X	TRANSISTOR	2	<R>
Q4701	2SD1819A-R	TRANSISTOR	1	<R>
Q6001	2SD1819A-R	TRANSISTOR	1	<R>
Q6003	2SD1820-R	TRANSISTOR	1	<R>
Q6501	2SD1819A-R	TRANSISTOR	1	<R>
QR4101,02	UN5215	TRANSISTOR-RESISTOR	2	<R>
QR4103	UN5213	TRANSISTOR	1	<R>
QR4201,02	UN5215	TRANSISTOR-RESISTOR	2	<R>
QR4203	UN5213	TRANSISTOR	1	<R>
QR4501	UN5213	TRANSISTOR	1	<R>
QR4502	UN5115	TRANSISTOR-RESISTOR	1	<R>
QR4503-07	UN5213	TRANSISTOR	5	<R>
QR4508	UN5113	TRANSISTOR-RESISTOR	1	<R>
QR4510	UN5213	TRANSISTOR	1	<R>
QR4511	UN511F	TRANSISTOR-RESISTOR	1	<R>
QR4512,13	UN5213	TRANSISTOR	2	<R>
QR4601	UN5213	TRANSISTOR	1	<R>
QR4603	UN5213	TRANSISTOR	1	<R>
QR4604	UN5211	TRANSISTOR-RESISTOR	1	<R>
QR4605,06	UN5213	TRANSISTOR	2	<R>
QR4607	UN5211	TRANSISTOR-RESISTOR	1	<R>
QR4701-04	UN5213	TRANSISTOR	4	<R>
QR6001	UN5213	TRANSISTOR	1	<R>
QR6002,03	UN5114	TRANSISTOR-RESISTOR	2	<R>
QR6501,02	UN5213	TRANSISTOR	2	<R>
QR6503-05	UN5114	TRANSISTOR-RESISTOR	3	<R>
QR6512	UN5211	TRANSISTOR-RESISTOR	1	<R>
QR6513-16	UN5114	TRANSISTOR-RESISTOR	4	<R>
QR6517	UN5213	TRANSISTOR	1	<R>
		RESISTORS		
R4101	ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R4102	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4103	ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	
R4104	ERJ3GEYJ155	M.RESISTOR CH 3W 1.5M	1	
R4105	ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R4106	ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R4107	ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R4108	ERJ3GEYJ820	M.RESISTOR CH 3W 82	1	
R4109	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4110	ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	
R4111	ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R4112	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4113	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4114	ERJ3GEYJ822	M.RESISTOR CH 3W 8.2K	1	
R4115	VRE0034E562	M.RESISTOR CH 1/10W 5.6K	1	
R4116	VRE0034E152	M.RESISTOR CH 1/10W 1.5K	1	
R4117	ERJ3GEYJ100	M.RESISTOR CH 3W 10	1	
R4118	ERJ3GEYJ683	M.RESISTOR CH 3W 68K	1	
R4119	ERJ3GEYJ121	M.RESISTOR CH 3W 120	1	
R4120	ERJ3GEYJ334	M.RESISTOR CH 3W 330K	1	
R4121	ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R4122	ERJ3GEYJ683	M.RESISTOR CH 3W 68K	1	
R4123	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R4124	ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R4125	ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R4126	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4127,28	ERJ3GEYJ104	M.RESISTOR CH 3W 100K	2	
R4129	ERJ3GEYJ681	M.RESISTOR CH 3W 680	1	
R4130	ERJ3GEYJ821	M.RESISTOR CH 3W 820	1	
R4131	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4132	ERJ3GEYJ153	M.RESISTOR CH 3W 15K	1	
R4133	ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R4136	ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R4137	ERJ3GEYJ392	M.RESISTOR CH 3W 3.9K	1	
R4138	ERJ3GEYJ331	M.RESISTOR CH 3W 330	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4139		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R4140		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4141		ERJ3GEYJ221	M.RESISTOR CH 3W 220	1	
R4146		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R4148		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R4149		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R4150-52		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	3	
R4153,54		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	2	
R4155		ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R4201		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R4202		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4203		ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	
R4204		ERJ3GEYJ155	M.RESISTOR CH 3W 1.5M	1	
R4205		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R4206		ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R4207		ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R4208		ERJ3GEYJ820	M.RESISTOR CH 3W 82	1	
R4209		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4210		ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	
R4211		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R4212		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4213		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4214		ERJ3GEYJ822	M.RESISTOR CH 3W 8.2K	1	
R4215		VRE0034E562	M.RESISTOR CH 1/10W 5.6K	1	
R4216		VRE0034E152	M.RESISTOR CH 1/10W 1.5K	1	
R4217		ERJ3GEYJ100	M.RESISTOR CH 3W 10	1	
R4218		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	1	
R4219		ERJ3GEYJ121	M.RESISTOR CH 3W 120	1	
R4220		ERJ3GEYJ334	M.RESISTOR CH 3W 330K	1	
R4221		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R4222		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	1	
R4223		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R4224		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R4225		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R4226		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4227,28		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	2	
R4229		ERJ3GEYJ681	M.RESISTOR CH 3W 680	1	
R4230		ERJ3GEYJ821	M.RESISTOR CH 3W 820	1	
R4231		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4232		ERJ3GEYJ153	M.RESISTOR CH 3W 15K	1	
R4233		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R4234,35		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	2	
R4236		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R4237		ERJ3GEYJ392	M.RESISTOR CH 3W 3.9K	1	
R4238		ERJ3GEYJ331	M.RESISTOR CH 3W 330	1	
R4239		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R4240		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4241		ERJ3GEYJ221	M.RESISTOR CH 3W 220	1	
R4243-45		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	3	
R4246		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R4248		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R4249		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R4250-52		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	3	
R4253,54		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	2	
R4255		ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R4301,02		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4303		VRE0034E821	M.RESISTOR CH 1/10W 820	1	
R4304		VRE0034E681	M.RESISTOR CH 1/10W 680	1	
R4305		VRE0034E821	M.RESISTOR CH 1/10W 820	1	
R4306		VRE0034E112	M.RESISTOR CH 1/10W 1.1K	1	
R4307		VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R4308		VRE0034E183	M.RESISTOR CH 1/10W 18K	1	
R4309		VRE0034E562	M.RESISTOR CH 1/10W 5.6K	1	
R4310		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R4311		VRE0034E303	M.RESISTOR CH 1/10W 30K	1	
R4312		VRE0034E123	M.RESISTOR CH 1/10W 12K	1	
R4313		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4314,15		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	
R4316,17		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	2	
R4318		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4319		ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R4320		ERJ3GEYJ220	M.RESISTOR CH 3W 22	1	
R4321		ERJ3GEYJ331	M.RESISTOR CH 3W 330	1	
R4322		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R4323		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R4324		ERJ3GEYG103	M.RESISTOR CH 3W 10K	1	
R4325		ERJ3GEYG823	M.RESISTOR CH 3W 82K	1	
R4326		ERJ3GEYG683	M.RESISTOR CH 3W 68K	1	
R4327		ERJ3GEYJ393	M.RESISTOR CH 3W 39K	1	
R4401,02		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4403		VRE0034E821	M.RESISTOR CH 1/10W 820	1	
R4404		VRE0034E681	M.RESISTOR CH 1/10W 680	1	
R4405		VRE0034E821	M.RESISTOR CH 1/10W 820	1	
R4406		VRE0034E112	M.RESISTOR CH 1/10W 1.1K	1	
R4407		VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R4408		VRE0034E183	M.RESISTOR CH 1/10W 18K	1	
R4409		VRE0034E562	M.RESISTOR CH 1/10W 5.6K	1	
R4410		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R4411		VRE0034E303	M.RESISTOR CH 1/10W 30K	1	
R4412		VRE0034E822	M.RESISTOR CH 1/10W 8.2K	1	
R4413		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R4414,15		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	
R4416,17		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	2	
R4418		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4419		ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R4420		ERJ3GEYJ220	M.RESISTOR CH 3W 22	1	
R4421		ERJ3GEYJ331	M.RESISTOR CH 3W 330	1	
R4422		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R4423		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R4424		ERJ3GEYG103	M.RESISTOR CH 3W 10K	1	
R4425		ERJ3GEYG823	M.RESISTOR CH 3W 82K	1	
R4426		ERJ3GEYG683	M.RESISTOR CH 3W 68K	1	
R4427		ERJ3GEYJ393	M.RESISTOR CH 3W 39K	1	
R4501		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4502		ERJ3GEYJ224	M.RESISTOR CH 3W 220K	1	
R4503		ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R4504		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4505		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R4506		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R4507		ERJ3GEYJ562	M.RESISTOR CH 3W 5.6K	1	
R4508		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R4509		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R4510		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R4512		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4513		VRE0034E433	M.RESISTOR CH 1/10W 43K	1	
R4514		ERJ3GEYJ562	M.RESISTOR CH 3W 5.6K	1	
R4515		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R4516		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4517		ERJ3GEYJ153	M.RESISTOR CH 3W 15K	1	
R4518		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R4519		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R4520		ERJ3GEYJ394	M.RESISTOR CH 3W 390K	1	
R4521		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R4522		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4523		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R4524		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4525		ERJ8GCYJ1R0	M.RESISTOR CH 1/8W 1.0	1	
R4526		ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R4527		ERJ3GEYJ390	M.RESISTOR CH 3W 39	1	
R4529		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R4530		ERJ3GEYJ153	M.RESISTOR CH 3W 15K	1	
R4601		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R4604		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R4605		VRE0034E682	M.RESISTOR CH 1/10W 6.8K	1	
R4606		VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4607		ERJ3GEYJ105	M.RESISTOR CH 3W 1M	1	
R4609		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R4610,11		ERJ3GEYJ562	M.RESISTOR CH 3W 5.6K	2	
R4612		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4613		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R4614		ERJ3GEYJ220	M.RESISTOR CH 3W 22	1	
R4615		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4616		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R4617		ERJ3GEYJ562	M.RESISTOR CH 3W 5.6K	1	
R4618		ERJ3GEYJ563	M.RESISTOR CH 3W 56K	1	
R4619		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R4621		VRE0034E682	M.RESISTOR CH 1/10W 6.8K	1	
R4622		VRE0034E912	M.RESISTOR CH 1/10W 9.1K	1	
R4623		ERJ3GEYJ392	M.RESISTOR CH 3W 3.9K	1	
R4626		ERJ3GEYJ822	M.RESISTOR CH 3W 8.2K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4627,28		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	2	
R4629		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R4630		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R4631,32		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	2	
R4633		ERJ3GEYJ562	M.RESISTOR CH 3W 5.6K	1	
R4634		ERJ3GEYJ392	M.RESISTOR CH 3W 3.9K	1	
R4635		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4703		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4704		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R4705		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4706		ERJ3GEYJ221	M.RESISTOR CH 3W 220	1	
R4707		ERJ3GEYJ562	M.RESISTOR CH 3W 5.6K	1	
R4708		ERJ3GEYJ330	M.RESISTOR CH 3W 33	1	
R4709		ERJ3GEYJ562	M.RESISTOR CH 3W 5.6K	1	
R4710		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R4711		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R4712		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R4713		ERJ3GEYJ823	M.RESISTOR CH 3W 82K	1	
R4714		ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R4715		ERJ3GEYJ334	M.RESISTOR CH 3W 330K	1	
R4716		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R4720		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4722		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R6001		ERJ3GEYJ184	M.RESISTOR CH 3W 180K	1	
R6003		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R6004		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R6005		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R6006		ERJ3GEYJ562	M.RESISTOR CH 3W 5.6K	1	
R6007,08		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R6010		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R6011-13		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	3	
R6016		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R6017,18		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	2	
R6019		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R6020,21		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	2	
R6022		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R6023		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R6024		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	1	
R6027		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R6028		ERJ3GEYJ114	M.RESISTOR CH 3W 110K	1	
R6029		ERJ3GEYJ181	M.RESISTOR CH 3W 180	1	
R6031,32		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R6033,34		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	2	
R6036		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R6040,41		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	2	
R6045-47		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	3	
R6050		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R6054,55		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	2	
R6057		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R6059		ERJ8GCYJ271	M.RESISTOR CH 1/8W 270	1	
R6060		ERJ3GEYJ393	M.RESISTOR CH 3W 39K	1	
R6061		ERJ3GEYJ184	M.RESISTOR CH 3W 180K	1	
R6062		ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R6063,64		ERJ8GCYJ101	COIL 100UH	2	
R6065		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R6066-68		ERJ8GCYG151	M.RESISTOR CH 1/8W 150	3	
R6070-72		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	3	
R6073		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6076		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6080		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6081		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	1	
R6082		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R6083		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R6085,86		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R6088,89		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	2	
R6090		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R6091,92		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	2	
R6501-05		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	5	
R6506		ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R6507		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R6509		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R6510		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R6511,12		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	2	
R6513		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	1	
R6514		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6515		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R6517-19		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	3	
R6520,21		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	2	
R6522-26		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	5	
R6527-32		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	6	
R6535		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R6536		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R6537		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R6538		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R6539,40		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	
R6541		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R6542		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R6544		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R6545		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R6546		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R6547		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6548		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R6549		ERJ3GEYJ394	M.RESISTOR CH 3W 390K	1	
R6550		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R6551		VRE0034E433	M.RESISTOR CH 1/10W 43K	1	
R6552		VRE0034E123	M.RESISTOR CH 1/10W 12K	1	
R6553		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R6554		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R6555		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R6556		ERJ3GEYJ564	M.RESISTOR CH 3W 560K	1	
R6558		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R6559		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R6560-62		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	3	
R6563,64		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	2	
R6565		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R6566		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R6568		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R6569		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R6570		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R6571		ERJ3GEYJ224	M.RESISTOR CH 3W 220K	1	
R6577,78		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	
R6579,80		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	2	
R6581-84		ERJ6GEYJ271	M.RESISTOR CH1/16W 270	4	
R6585		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R6586		ERJ3GEYJ394	M.RESISTOR CH 3W 390K	1	
R6588		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R6589		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R6593		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R6597		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R6801		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R6802,03		ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	2	
R6804		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6806		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6808-11		ERJ3GEYJ224	M.RESISTOR CH 3W 220K	4	
R6815		ERJ3GEYJ224	M.RESISTOR CH 3W 220K	1	
R6823		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R6824		ERJ3GEYJ394	M.RESISTOR CH 3W 390K	1	
R6825		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R6826		ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R6827		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R6828		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R6829		VRE0034E332	M.RESISTOR CH 1/10W 3.3K	1	
R6830		VRE0034E821	M.RESISTOR CH 1/10W 820	1	
R6831		VRE0034E562	M.RESISTOR CH 1/10W 5.6K	1	
R6842		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R6843		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R6844		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R6845		ERJ3GEYJ153	M.RESISTOR CH 3W 15K	1	
R6846		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R6847		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R6848		ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R6849		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R6850		ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R6851		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	1	
R6852,53		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	
R6854		ERJ3GEYJ105	M.RESISTOR CH 3W 1M	1	
SW6001		VSS0367-08B	SWITCH	1	<R>

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
SW6501	VSS0367-08B	SWITCH	1	<R>
VC6501	VCV0048	TRIMMER	1	
VR4101	EVM7JGA00B53	V.RESISTOR 5K	1	
VR4102	EVM7JGA00B24	V.RESISTOR 20K	1	
VR4103,04	EVM7JGA00B14	V.RESISTOR 10K	2	
VR4105	EVM7JGA00B24	V.RESISTOR 20K	1	
VR4106	EVM7JGA00B54	V.RESISTOR 50K	1	
VR4201	EVM7JGA00B53	V.RESISTOR 5K	1	
VR4202	EVM7JGA00B24	V.RESISTOR 20K	1	
VR4203,04	EVM7JGA00B14	V.RESISTOR 10K	2	
VR4205	EVM7JGA00B24	V.RESISTOR 20K	1	
VR4206	EVM7JGA00B54	V.RESISTOR 50K	1	
VR4301,02	EVM7JGA00B14	V.RESISTOR 10K	2	
VR4303	EVM7JGA00B24	V.RESISTOR 20K	1	
VR4401,02	EVM7JGA00B14	V.RESISTOR 10K	2	
VR4403	EVM7JGA00B24	V.RESISTOR 20K	1	
VR4601	EVM7JGA00B53	V.RESISTOR 5K	1	
VR6001	EVM7JGA00B15	V.RESISTOR 100K	1	
X6001	VSX0461	CRYSTAL OSCILLATOR	1	<R>
X6501	VSX0499	CRYSTAL OSCILLATOR	1	<R>
X6502	VSX0602	CRYSTAL OSCILLATOR	1	<R>
X6801	VSX0498	CRYSTAL OSCILLATOR	1	<R>
X6802	VSX0614	CRYSTAL OSCILLATOR	1	<R>
	VEP06957A	P.C.BOARD W/COMPONENT		
		MECHA INTERFACE		
P9001	VJP3125D010	CONNECTOR (MALE)	1	
P9002	VJP3125D004	CONNECTOR (MALE)	1	
P9003	VJP3125B003	CONNECTOR (MALE)	1	
P9004	VJP3125B005	CONNECTOR (MALE)	1	
P9005	VJP3172B002	CONNECTOR (MALE)	1	
P9006	VJP3172B003	CONNECTOR (MALE)	1	
P9007	VJP3172B002	CONNECTOR (MALE)	1	
P9008	VJP3125D002	CONNECTOR (MALE)	1	
P9011,12	VJS2907B026	CONNECTOR (FEMALE)	2	
P9013	VJS3406B012	CONNECTOR (FEMALE)	1	
P9014	VJS3406B022	CONNECTOR (FEMALE)	1	
P9015	VJS2958B010	CONNECTOR (FEMALE)	1	
P9016	VJS3406D014	CONNECTOR (FEMALE)	1	
P9017	VJP3172B004	CONNECTOR (MALE)	1	
P9018	VJP3172B003	CONNECTOR (MALE)	1	
P9019	VJP3172B008	CONNECTOR (MALE)	1	
P9020	VJP3125D010	CONNECTOR (MALE)	1	
P9021	VJP3172B002	CONNECTOR (MALE)	1	
		RESISTORS		
R9001	ERJ6GEYJ103	M.RESISTOR CH1/16W 10K	1	
R9002	ERJ6GEYJ472	M.RESISTOR CH1/16W 4.7K	1	
R9003	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
W1-W5	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	5	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	VEP23198C	P.C.BOARD W/COMPONENT		
		PROCESS		
	VEP23218A	P.C.BOARD W/COMPONENT		ON VEP23198C
		D/S SUB		
	VEP23226A	P.C.BOARD W/COMPONENT		ON VEP23198C
		CAMERA BUFFER		
	VEP23230A	P.C.BOARD W/COMPONENT		ON VEP23198C
		D/S SUB 2		
		CAPACITORS		
C1	ECST1VY224Z	T.CAPACITOR 35V 0.22U	1	
C1	ECUX1H471JCV	C.CAPACITOR 50V 470P	1	
C2	ECST1VY224Z	T.CAPACITOR 35V 0.22U	1	
C2	ECUX1H471JCV	C.CAPACITOR 50V 470P	1	
C3	ECST1VY224Z	T.CAPACITOR 35V 0.22U	1	
C3	ECUX1H471JCV	C.CAPACITOR 50V 470P	1	
C4	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4	ECUX1H391JCV	C.CAPACITOR 50V 390P	1	
C5	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C5,C6	ECUX1H391JCV	C.CAPACITOR 50V 390P	2	
C7-C9	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	3	
C3001	ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C3002	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3003	ECUX1H180JCV	C.CAPACITOR 50V 18P	1	
C3004	ECUX1H680JCV	C.CAPACITOR 50V 68P	1	
C3005-07	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	3	
C3008,09	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	2	
C3010	ECUX1H151JCV	C.CAPACITOR 50V 150P	1	
C3011	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3012	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3013	ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C3014	ECUX1H330JCV	C.CAPACITOR 50V 33P	1	
C3015	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3016	ECUX1H180JCV	C.CAPACITOR 50V 18P	1	
C3017	ECUX1H470JCV	C.CAPACITOR 50V 47P	1	
C3018,19	ECUX1H101JCV	C.CAPACITOR 50V 100P	2	
C3020	ECUX1H330JCV	C.CAPACITOR 50V 33P	1	
C3021,22	ECUX1H150JCV	C.CAPACITOR 50V 15P	2	
C3023-25	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	3	
C3026	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3027-29	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	3	
C3030	ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3031	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3032	ECEV1HNR47Q	E.CAPACITOR 50V 0.47U	1	
C3033	ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
C3034	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3036	ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3038-40	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	3	
C3041	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3042	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3043	ECEV1HN010Q	E.CAPACITOR 50V 1U	1	
C3044	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3046	ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3047,48	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3049	ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3050-52	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	3	
C3054	ECUX1H820JCV	C.CAPACITOR 50V 82P	1	
C3055	ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C3056	ECEV1CN100Q	E.CAPACITOR 16V 10U	1	
C3057	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3058	ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3059,60	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3061	ECEV1EN3R3Q	E.CAPACITOR 16V 3.3U	1	
C3062	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3063		ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
C3064,65		ECUX1H390JCV	C.CAPACITOR 50V 39P	2	
C3066		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3067		ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C3068		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3070		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3071		ECEV1CN100Q	E.CAPACITOR 16V 10U	1	
C3072-77		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	6	
C3078		ECUX1H330JCV	C.CAPACITOR 50V 33P	1	
C3079,80		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3083-85		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	3	
C3087-91		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	5	
C3093		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3095-98		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	4	
C3099		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3101,02		ECUX1H470JCV	C.CAPACITOR 50V 47P	2	
C3106		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3108		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3109		ECUX1H561JCV	C.CAPACITOR 50V 560P	1	
C3110,11		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3112		ECUX1H150JCV	C.CAPACITOR 50V 15P	1	
C3113		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3114		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3116		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3201		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3202		ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C3203		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3205		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3207		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3209,10		ECUX1H220JCV	C.CAPACITOR 50V 22P	2	
C3211		ECUX1H270JCV	C.CAPACITOR 50V 27P	1	
C3212		ECEV1HN010Q	E.CAPACITOR 50V 1U	1	
C3213		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C3214		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3215		ECUX1H470JCV	C.CAPACITOR 50V 47P	1	
C3216		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3217		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3218		ECUX1H220JCV	C.CAPACITOR 50V 22P	1	
C3219		ECUX1H100DCV	C.CAPACITOR 50V 10P	1	
C3220		ECEV1HN010Q	E.CAPACITOR 50V 1U	1	
C3221		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C3222		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3223		ECUX1H470JCV	C.CAPACITOR 50V 47P	1	
C3224		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3225		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3226		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3227,28		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3229,30		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	2	
C3231		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C3232		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3233		ECEV0JN470Q	E.CAPACITOR 6.3V 47U	1	
C3234		ECUX1H330JCV	C.CAPACITOR 50V 33P	1	
C3235		ECUX1H150JCV	C.CAPACITOR 50V 15P	1	
C3236		ECUX1H270JCV	C.CAPACITOR 50V 27P	1	
C3237		ECUX1H070DCV	C.CAPACITOR 50V 7P	1	
C3238		ECUX1H270JCV	C.CAPACITOR 50V 27P	1	
C3241		ECUX1H181JCV	C.CAPACITOR 50V 180P	1	
C3242		ECUX1H330JCV	C.CAPACITOR 50V 33P	1	
C3243		ECUX1H120JCV	C.CAPACITOR 50V 12P	1	
C3244		ECUX1H330JCV	C.CAPACITOR 50V 33P	1	
C3245,46		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3247		ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C3259		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3260		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3261		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3401		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3402		ECUX1H102JV	C.CAPACITOR 50V 1000P	1	
C3403		ECEV1HN010Q	E.CAPACITOR 50V 1U	1	
C3404		ECUX1H221JCV	C.CAPACITOR 50V 220P	1	
C3405		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3406-10		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	5	
C3414-17		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	4	
C3418		ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C3419		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3420		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3421		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3423		ECEV1HNR22S	E.CAPACITOR 50V 0.22U	1	
C3424		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3426		ECEV1HNR22S	E.CAPACITOR 50V 0.22U	1	
C3427		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3429		ECEV1HNR22S	E.CAPACITOR 50V 0.22U	1	
C3430		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3431		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3432		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3433,34		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	2	
C3435,36		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
C3437		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3438		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3439		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3440		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3447-55		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	9	
C3456-58		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	3	
C3459		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C3460		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3461		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3462,63		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3464		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3465-68		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	4	
C3469		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3470		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3471		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3475-78		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	4	
C3479		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3480		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3481		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3482		VCEA0JAP470	E.CAPACITOR 6.3V 47U	1	
C3483		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3484-88		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	5	
C3489		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3490		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3491,92		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	2	
C3494		ECUX1H120JCV	C.CAPACITOR 50V 12P	1	
C3499		ECUX1H120JCV	C.CAPACITOR 50V 12P	1	
C3504		ECUX1H120JCV	C.CAPACITOR 50V 12P	1	
C3508-10		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	3	
C3521-23		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	3	
C3527,28		ECUX1H150JCV	C.CAPACITOR 50V 15P	2	
C3530		ECUX1H100DCV	C.CAPACITOR 50V 10P	1	
C3531,32		ECUX1H150JCV	C.CAPACITOR 50V 15P	2	
C3534		ECUX1H100DCV	C.CAPACITOR 50V 10P	1	
C3535,36		ECUX1H150JCV	C.CAPACITOR 50V 15P	2	
C3538		ECUX1H100DCV	C.CAPACITOR 50V 10P	1	
C3542-44		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	3	
C3545-47		ECEA1AKN100	E.CAPACITOR 10V 10U	3	
C3600		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3602		ECEV1HN010Q	E.CAPACITOR 50V 1U	1	
C3603-07		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	5	
C3609		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3610		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3617		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3618		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3619		ECEV1EN3R3Q	E.CAPACITOR 16V 3.3U	1	
C3620-26		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	7	
C3629,30		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3701-09		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	9	
C3710-12		ECUX1H100DCV	C.CAPACITOR 50V 10P	3	
C3713		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3714		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3715,16		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3717		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3718,19		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3720		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3721-23		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	3	
C3724		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3725-29		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	5	
C3730		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3731-36		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	6	
C3737		ECEV1HN010Q	E.CAPACITOR 50V 1U	1	
C3738		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3739		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3740		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3741-43		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	3	
C3744		ECUX1H331JCV	C.CAPACITOR 50V 330P	1	
C3748		ECUX1H221JCV	C.CAPACITOR 50V 220P	1	
C3749		ECUX1H101JCV	C.CAPACITOR 50V 100P	1	
C3753		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3754		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3755		ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C3756-58		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	3	
C3759		ECUX1H151JCV	C.CAPACITOR 50V 150P	1	
C3760		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3761		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C3762		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3763,64		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3765		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3766,67		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3768		ECUX1H180JCV	C.CAPACITOR 50V 18P	1	
C3769		ECUX1H121JCV	C.CAPACITOR 50V 120P	1	
C3770		ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C3771		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C3772		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3773,74		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C3775		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3776-79		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	4	
C3780		ECUX1H100DCV	C.CAPACITOR 50V 10P	1	
C3781		ECUX1H270JCV	C.CAPACITOR 50V 27P	1	
C3782		ECUX1H100DCV	C.CAPACITOR 50V 10P	1	
C3783		ECUX1H270JCV	C.CAPACITOR 50V 27P	1	
C3784		ECUX1H120JCV	C.CAPACITOR 50V 12P	1	
C3787		ECEV1HN010Q	E.CAPACITOR 50V 1U	1	
C3790-94		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	5	
C3795		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C3796-99		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	4	
C3801		ECUX1H331JCV	C.CAPACITOR 50V 330P	1	
C3803-06		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	4	
C3807,08		ECUX1H151JCV	C.CAPACITOR 50V 150P	2	
C3809		VCEA0JAP470	E.CAPACITOR 6.3V 47U	1	
C3810		ECCF1H680JC5	C.CAPACITOR 50V 68P	1	
C3900-02		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	3	
CN3002,03		VJS3505A080	CONNECTOR (FEMALE)	2	
D3001-04		MA141K	DIODE	4	<R>
D3005		MA335-R	DIODE	1	<R>
D3101-03		MA141K	DIODE	3	<R>
D3600-03		MA141K	DIODE	4	<R>
FL3401-03		ELB4C556	FILTER	3	
FL3701		ELB4D551	FILTER	1	
IC1		NJM062M	IC	1	<R>
IC1		TC7S08F	IC	1	<R>
IC2		NJM062M	IC	1	<R>
IC2		TC7S08F	IC	1	<R>
IC3		MC14053BF	IC	1	<R>
IC3		TC7S08F	IC	1	<R>
IC3001		AN91A12S	IC	1	<R>
IC3002		AD790JR	IC	1	<R>
IC3003,04		MN74HC221S	IC	2	<R>
IC3005		SN7HC04AB	IC	1	<R>
IC3006		SN7HC00AB	IC	1	<R>
IC3007		SN7HC125AB	IC	1	<R>
IC3008		TL062CDB	IC	1	<R>
IC3009		SN7HC04AB	IC	1	<R>
IC3010,11		TL062CDB	IC	2	<R>
IC3012		MC14053BF	IC	1	<R>
IC3013		TL062CDB	IC	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC3014		AD790JR	IC	1	<R>
IC3015		UPD65650J199	IC	1	<R>
IC3016,17		AD790JR	IC	2	<R>
IC3018		MC74HC244AF	IC	1	<R>
IC3019		MN74HC221S	IC	1	<R>
IC3020		CG24692-4188	IC	1	<R>
IC3022		SN7HC04AB	IC	1	<R>
IC3023,24		MC74HC244AF	IC	2	<R>
IC3025		SN7HC74AB	IC	1	<R>
IC3028		SN74LS221NS	IC	1	<R>
IC3029		MC74HC244AF	IC	1	<R>
IC3030		XC62AP5002ML	IC	1	<R>
IC3031		SN7HC00AB	IC	1	<R>
IC3201,02		MC14577BF	IC	2	<R>
IC3203		M51272FP	IC	1	<R>
IC3401,02		TL062CDB	IC	2	<R>
IC3405		MC14053BF	IC	1	<R>
IC3406		UPC2391GB	IC	1	<R>
IC3407		XC62AP5002ML	IC	1	<R>
IC3600		VSI1506	IC	1	<R>
IC3601		HY256ALJ10E2	IC	1	<R>
IC3602		NJM2904M	IC	1	<R>
IC3603		MN12821	IC	1	<R>
IC3604,05		AK6440F	IC	2	<R>
IC3606		MC14053BF	IC	1	<R>
IC3607		MB88344PFV	IC	1	<R>
IC3608		NJM2904M	IC	1	<R>
IC3610		NJM2904M	IC	1	<R>
IC3611,12		HD151015SS	IC	2	<R>
IC3613		SN7HC08AB	IC	1	<R>
IC3701-03		MN655431SH	IC	3	<R>
IC3704		MN6734	IC	1	<R>
IC3705		ADV7128KR30	IC	1	<R>
IC3706		MN657011H	IC	1	<R>
IC3707		SN7HC04AB	IC	1	<R>
IC3708		AD589JR	IC	1	<R>
IC3709		NJM592M8	IC	1	<R>
IC3710		AN2040SB	IC	1	<R>
IC3711-13		HD151015SS	IC	3	<R>
IC3714		XC62AP5002ML	IC	1	<R>
IC3715		XC62AP3502ML	IC	1	<R>
IC3716,17		XC62AP5002ML	IC	2	<R>
IC3901-03		MC74HC244AF	IC	3	<R>
ICS3021		VJS3427X028	CONNECTOR (FEMALE)	1	<R>
L1-L3		VLQ0163J1R5	COIL 1.5UH	3	
L3001		VLQ0163J221	COIL 220UH	1	
L3002		VLQ0319K101	COIL 100UH	1	
L3003		VLQ0163J680	COIL 68UH	1	
L3004-06		VLQ0319K101	COIL 100UH	3	
L3007		VLQ0163J221	COIL 220UH	1	
L3008-10		VLQ0319K101	COIL 100UH	3	
L3011		VLP0147	COIL	1	
L3201,02		VLQ0319K101	COIL 100UH	2	
L3203,04		VLQ0163J470	COIL 47UH	2	
L3205		VLQ0163J8R2	COIL 8.2UH	1	
L3206		VLQ0163J150	COIL 15UH	1	
L3211		VLQ0319K101	COIL 100UH	1	
L3401-03		VLQ0319K101	COIL 100UH	3	
L3410,11		VLQ0319K220	COIL 22UH	2	
L3412,13		VLQ0319K101	COIL 100UH	2	
L3414		VLQ0163J220	COIL 22UH	1	
L3415		VLQ0163J1R5	COIL 1.5UH	1	
L3416		VLQ0163J120	COIL 12UH	1	
L3417		VLQ0163J220	COIL 22UH	1	
L3418		VLQ0163J1R5	COIL 1.5UH	1	
L3419		VLQ0163J120	COIL 12UH	1	
L3420		VLQ0163J220	COIL 22UH	1	
L3421		VLQ0163J1R5	COIL 1.5UH	1	
L3422		VLQ0163J120	COIL 12UH	1	
L3600		VLQ0319K101	COIL 100UH	1	
L3605,06		VLQ0319K101	COIL 100UH	2	
L3701-04		VLQ0319K101	COIL 100UH	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L3705	VLQ0163J470	COIL 47UH	1	
L3706	VLQ0319K101	COIL 100UH	1	
L3708	VLQ0319K101	COIL 100UH	1	
L3710-12	VLQ0319K101	COIL 100UH	3	
P3001,02	VJS2907D025	CONNECTOR (FEMALE)	2	
P3003	VJP3125B006	CONNECTOR (MALE)	1	
P3004	VJS3406D018	CONNECTOR (FEMALE)	1	
P3005	VJP3125B008	CONNECTOR (MALE)	1	
P3006	VJP3125D004	CONNECTOR (MALE)	1	
P3007	VJP3125D009	CONNECTOR (MALE)	1	
P3008	VJP3358A012	CONNECTOR (MALE)	1	
P3009	VJP3358A018	CONNECTOR (MALE)	1	
P3010	VJP3358A030	CONNECTOR (MALE)	1	
Q1-Q3	2SC3930-BC	TRANSISTOR	3	<R>
Q3001	2SD1819A	TRANSISTOR	1	<R>
Q3002	2SB1218A	TRANSISTOR	1	<R>
Q3003,04	2SK608-QR	TRANSISTOR	2	<R>
Q3005	2SB1218A	TRANSISTOR	1	<R>
Q3103	UN5213	TRANSISTOR	1	<R>
Q3201,02	2SB1218A	TRANSISTOR	2	<R>
Q3203	2SD1819A	TRANSISTOR	1	<R>
Q3204	2SB1218A	TRANSISTOR	1	<R>
Q3205	2SD1819A	TRANSISTOR	1	<R>
Q3206	XN4401	TRANSISTOR	1	<R>
Q3207	XN4501	TRANSISTOR	1	<R>
Q3208	XN4401	TRANSISTOR	1	<R>
Q3209	XN4501	TRANSISTOR	1	<R>
Q3401	2SD1819A	TRANSISTOR	1	<R>
Q3403	2SD1819A	TRANSISTOR	1	<R>
Q3405	2SD1819A	TRANSISTOR	1	<R>
Q3407-09	2SD1819A	TRANSISTOR	3	<R>
Q3410	2SC3930-BC	TRANSISTOR	1	<R>
Q3411,12	2SA1532-BC	TRANSISTOR	2	<R>
Q3414	2SC3930-BC	TRANSISTOR	1	<R>
Q3416	2SD1819A	TRANSISTOR	1	<R>
Q3417	2SC3930-BC	TRANSISTOR	1	<R>
Q3418,19	2SA1532-BC	TRANSISTOR	2	<R>
Q3421	2SC3930-BC	TRANSISTOR	1	<R>
Q3423	2SD1819A	TRANSISTOR	1	<R>
Q3424	2SC3930-BC	TRANSISTOR	1	<R>
Q3425,26	2SA1532-BC	TRANSISTOR	2	<R>
Q3428	2SC3930-BC	TRANSISTOR	1	<R>
Q3430	2SD1819A	TRANSISTOR	1	<R>
Q3431-33	2SC3930-BC	TRANSISTOR	3	<R>
Q3701-03	2SD1819A	TRANSISTOR	3	<R>
Q3704,05	2SB1218A	TRANSISTOR	2	<R>
Q3706	2SD1819A	TRANSISTOR	1	<R>
Q3707,08	2SB1218A	TRANSISTOR	2	<R>
Q3709-11	2SD1819A	TRANSISTOR	3	<R>
Q3712,13	2SB1218A	TRANSISTOR	2	<R>
Q3714-16	2SD1819A	TRANSISTOR	3	<R>
Q3718,19	2SB1218A	TRANSISTOR	2	<R>
QR3602	UN5213	TRANSISTOR	1	<R>
QR3605,06	UN5213	TRANSISTOR	2	<R>
		RESISTORS		
R1	ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R1	ERJ6GEYJ823	M.RESISTOR CH1/16W 82K	1	
R2	ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R2	ERJ6GEYJ823	M.RESISTOR CH1/16W 82K	1	
R3	ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R3	ERJ6GEYJ823	M.RESISTOR CH1/16W 82K	1	
R4	ERDS2TJ155	C.RESISTOR 1/4W 1.5M	1	
R4	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R5,R6	ERDS2TJ155	C.RESISTOR 1/4W 1.5M	2	
R3001	ERJ3GEYJ105	M.RESISTOR CH 3W 1M	1	
R3002	ERJ3GEYJ392	M.RESISTOR CH 3W 3.9K	1	
R3003	ERJ3GEYJ221	M.RESISTOR CH 3W 220	1	
R3004	ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R3005-07	ERJ3GEYJ223	M.RESISTOR CH 3W 22K	3	
R3008	ERJ3GEYJ224	M.RESISTOR CH 3W 220K	1	
R3009	ERJ3GEYJ684	M.RESISTOR CH 3W 680K	1	
R3010	ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R3011,12	ERJ3GEYJ822	M.RESISTOR CH 3W 8.2K	2	
R3013	ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R3014	ERJ3GEYJ224	M.RESISTOR CH 3W 220K	1	
R3015	ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R3016	ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3017	ERJ3GEYJ683	M.RESISTOR CH 3W 68K	1	
R3018	ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R3019,20	ERJ3GEYJ563	M.RESISTOR CH 3W 56K	2	
R3021	ERJ3GEYJ682	M.RESISTOR CH 3W 6.8K	1	
R3022	ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R3023,24	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	
R3025	ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3028	ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R3029	ERJ3GEYJ153	M.RESISTOR CH 3W 15K	1	
R3030	ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R3031	ERJ3GEYJ105	M.RESISTOR CH 3W 1M	1	
R3032	ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R3033	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3034	ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3035	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3036	ERJ3GEYJ153	M.RESISTOR CH 3W 15K	1	
R3037	ERJ3GEYJ273	M.RESISTOR CH 3W 27K	1	
R3038	ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R3039	ERJ3GEYJ105	M.RESISTOR CH 3W 1M	1	
R3040	ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R3041	ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R3042	ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R3043	VRE0034E122	M.RESISTOR CH 1/10W 1.2K	1	
R3044	ERJ3GEYJ181	M.RESISTOR CH 3W 180	1	
R3045	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3046	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3047	ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3048	ERJ3GEYJ822	M.RESISTOR CH 3W 8.2K	1	
R3049	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3051	ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R3052	ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3053	ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R3054	ERJ3GEYJ153	M.RESISTOR CH 3W 15K	1	
R3055	ERJ3GEYJ684	M.RESISTOR CH 3W 680K	1	
R3056	ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R3057	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3058	ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R3059	ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R3060	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3061,62	ERJ3GEYJ473	M.RESISTOR CH 3W 47K	2	
R3063,64	ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	2	
R3065	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3068	ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R3069	ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R3070	ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R3071	ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3072	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3074	ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R3076	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3080,81	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R3083	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3085	ERJ3GEYJ392	M.RESISTOR CH 3W 3.9K	1	
R3086	ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R3087	ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3088	ERJ3GEYJ821	M.RESISTOR CH 3W 820	1	
R3089	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3092	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3093	ERJ3GEYJ221	M.RESISTOR CH 3W 220	1	
R3094	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3095	ERJ3GEYJ221	M.RESISTOR CH 3W 220	1	
R3096	ERJ3GEYJ392	M.RESISTOR CH 3W 3.9K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3099-02		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	4	
R3106		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3109		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3110		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3111		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3112		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R3114		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R3115		VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R3117		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3118		ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3123,24		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R3126		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3127		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R3128		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R3134,35		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	2	
R3136		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3140		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3142,43		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R3201		ERJ3GEYJ393	M.RESISTOR CH 3W 39K	1	
R3202		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3203		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3204		ERJ3GEYJ821	M.RESISTOR CH 3W 820	1	
R3205		ERJ3GEYJ273	M.RESISTOR CH 3W 27K	1	
R3206		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3207,08		ERJ3GEYJ561	M.RESISTOR CH 3W 560	2	
R3209		ERJ3GEYJ273	M.RESISTOR CH 3W 27K	1	
R3210		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3211,12		ERJ3GEYJ561	M.RESISTOR CH 3W 560	2	
R3214,15		ERJ3GEYJ561	M.RESISTOR CH 3W 560	2	
R3216		ERJ3GEYJ821	M.RESISTOR CH 3W 820	1	
R3217		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3218		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R3219		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3220		ERJ3GEYJ331	M.RESISTOR CH 3W 330	1	
R3223		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3224		ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R3225		ERJ3GEYJ273	M.RESISTOR CH 3W 27K	1	
R3226		ERJ3GEYJ821	M.RESISTOR CH 3W 820	1	
R3227		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3228		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R3229		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3230		ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R3231,32		ERJ3GEYJ273	M.RESISTOR CH 3W 27K	2	
R3233		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R3234,35		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	
R3236-38		ERJ3GEYJ471	M.RESISTOR CH 3W 470	3	
R3239		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3243		ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3244		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3245		ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3246		ERJ3GEYJ273	M.RESISTOR CH 3W 27K	1	
R3247		ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R3248		ERJ3GEYJ681	M.RESISTOR CH 3W 680	1	
R3249		ERJ3GEYJ182	M.RESISTOR CH 3W 1.8K	1	
R3250		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3251,52		ERJ3GEYJ220	M.RESISTOR CH 3W 22	2	
R3253		ERJ3GEYJ100	M.RESISTOR CH 3W 10	1	
R3254		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3255		ERJ3GEYJ182	M.RESISTOR CH 3W 1.8K	1	
R3256		ERJ3GEYJ100	M.RESISTOR CH 3W 10	1	
R3258		ERJ3GEYJ680	M.RESISTOR CH 3W 68	1	
R3259		ERJ3GEYJ182	M.RESISTOR CH 3W 1.8K	1	
R3260		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3261,62		ERJ3GEYJ220	M.RESISTOR CH 3W 22	2	
R3263		ERJ3GEYJ100	M.RESISTOR CH 3W 10	1	
R3264		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3265		ERJ3GEYJ182	M.RESISTOR CH 3W 1.8K	1	
R3266		ERJ3GEYJ100	M.RESISTOR CH 3W 10	1	
R3267,68		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R3269		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R3270		VRE0034E221	M.RESISTOR CH 1/10W 220	1	
R3271		VRE0034E272	M.RESISTOR CH 1/10W 2.7K	1	
R3401		ERJ3GEYJ104	M.RESISTOR CH 3W 100K	1	
R3402,03		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	2	
R3404		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R3405		ERJ3GEYJ474	M.RESISTOR CH 3W 470K	1	
R3406,07		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	2	
R3408-10		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	3	
R3414-16		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	3	
R3417		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3424		ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R3425		ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R3426		ERJ3GEYJ152	M.RESISTOR CH 3W 1.5K	1	
R3433		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3434		ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3435		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3436		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3437		ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3439		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3440		ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3441		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3442		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3443		ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3445		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3446		ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3447		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3448		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3449		ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3451		ERJ3GEYJ273	M.RESISTOR CH 3W 27K	1	
R3452		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3453		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	1	
R3454		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3455		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	1	
R3456,57		ERJ3GEYJ392	M.RESISTOR CH 3W 3.9K	2	
R3458		ERJ3GEYJ681	M.RESISTOR CH 3W 680	1	
R3459,60		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	2	
R3461-64		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	4	
R3465,66		VRE0034E473	M.RESISTOR CH 1/10W 47K	2	
R3467,68		VRE0034E103	M.RESISTOR CH 1/10W 10K	2	
R3469		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R3470		VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R3471,72		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	
R3473-75		ERJ3GEYJ153	M.RESISTOR CH 3W 15K	3	
R3476-79		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	4	
R3480		ERJ3GEYJ392	M.RESISTOR CH 3W 3.9K	1	
R3481		ERJ3GEYJ273	M.RESISTOR CH 3W 27K	1	
R3483		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3484		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	1	
R3485		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3486		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	1	
R3487		ERJ3GEYJ681	M.RESISTOR CH 3W 680	1	
R3488		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R3489		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3490		ERJ3GEYJ681	M.RESISTOR CH 3W 680	1	
R3491		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3492		ERJ3GEYJ683	M.RESISTOR CH 3W 68K	1	
R3493,94		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	2	
R3504		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R3505		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R3506		ERJ3GEYJ392	M.RESISTOR CH 3W 3.9K	1	
R3507		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R3508		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R3509		ERJ3GEYJ392	M.RESISTOR CH 3W 3.9K	1	
R3510		ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R3511		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R3512		ERJ3GEYJ392	M.RESISTOR CH 3W 3.9K	1	
R3513		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R3514		ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R3516		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3518		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3519		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3520		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3521		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R3524		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3525		ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3532		ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3533		ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3534,35		ERJ3GEYJ473	M.RESISTOR CH 3W 47K	2	
R3537		ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3539		ERJ3GEYJ331	M.RESISTOR CH 3W 330	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3540	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3541	ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3542	ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R3545	ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3546	ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3553	ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3554	ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3555	ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R3556	ERJ3GEYJ393	M.RESISTOR CH 3W 39K	1	
R3558	ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3560	ERJ3GEYJ561	M.RESISTOR CH 3W 560	1	
R3561	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3562	ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3563	ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3566	ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3567	ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3574	ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3575	ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R3581	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3587-89	ERJ3GEYJ473	M.RESISTOR CH 3W 47K	3	
R3591	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3600	ERJ3GEYJ680	M.RESISTOR CH 3W 68	1	
R3601	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3602-04	ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	3	
R3607	ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R3615	ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R3616	ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R3617	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3618	ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R3619,20	ERJ3GEYJ563	M.RESISTOR CH 3W 56K	2	
R3623	ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R3624	ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R3625,26	ERJ3GEYJ104	M.RESISTOR CH 3W 100K	2	
R3629,30	ERJ3GEYJ682	M.RESISTOR CH 3W 6.8K	2	
R3631	ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R3632	ERJ3GEYJ682	M.RESISTOR CH 3W 6.8K	1	
R3633	ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R3634,35	ERJ3GEYJ223	M.RESISTOR CH 3W 22K	2	
R3636-38	ERJ3GEYJ183	M.RESISTOR CH 3W 18K	3	
R3640	ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R3642,43	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	
R3701-03	ERJ3GEYJ151	M.RESISTOR CH 3W 150	3	
R3704-46	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	43	
R3747	VRE0034E181	M.RESISTOR CH 1/10W 180	1	
R3748	VRE0034E561	M.RESISTOR CH 1/10W 560	1	
R3749	VRE0034E121	M.RESISTOR CH 1/10W 120	1	
R3752	VRE0034E821	M.RESISTOR CH 1/10W 820	1	
R3753	VRE0034E562	M.RESISTOR CH 1/10W 5.6K	1	
R3754	VRE0034E472	M.RESISTOR CH 1/10W 4.7K	1	
R3755	VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R3756	VRE0034E221	M.RESISTOR CH 1/10W 220	1	
R3757,58	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R3762	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3764	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3765	ERJ3GEYJ220	M.RESISTOR CH 3W 22	1	
R3766	ERJ3GEYJ181	M.RESISTOR CH 3W 180	1	
R3767	ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R3768	ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	
R3769	ERJ3GEYJ821	M.RESISTOR CH 3W 820	1	
R3770	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3771	ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R3772	ERJ3GEYJ331	M.RESISTOR CH 3W 330	1	
R3773	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3774	ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R3775	ERJ3GEYJ220	M.RESISTOR CH 3W 22	1	
R3776,77	ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	2	
R3778	ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R3779	ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R3780	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3781	ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R3782	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3783	ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R3784	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3785	ERJ3GEYJ682	M.RESISTOR CH 3W 6.8K	1	
R3786,87	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3788	ERJ3GEYJ680	M.RESISTOR CH 3W 68	1	
R3789	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R3790	VRE0034E183	M.RESISTOR CH 1/10W 18K	1	
R3791	VRE0034E682	M.RESISTOR CH 1/10W 6.8K	1	
R3792	VRE0034E683	M.RESISTOR CH 1/10W 68K	1	
R3793	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R3794	ERJ3GEYJ821	M.RESISTOR CH 3W 820	1	
R3795	ERJ3GEYJ221	M.RESISTOR CH 3W 220	1	
R3796	ERJ3GEYJ182	M.RESISTOR CH 3W 1.8K	1	
R3797	ERJ3GEYJ681	M.RESISTOR CH 3W 680	1	
R3798	ERJ3GEYJ220	M.RESISTOR CH 3W 22	1	
R3799	ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R3800	ERJ3GEYJ391	M.RESISTOR CH 3W 390	1	
R3801	ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R3803	ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3805	ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3806	ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R3807	ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3809	ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R3810	ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R3811	ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	
R3812	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3818	ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	1	
R3819	ERJ3GEYJ181	M.RESISTOR CH 3W 180	1	
R3820	ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R3821	ERJ3GEYJ220	M.RESISTOR CH 3W 22	1	
R3822	ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R3823	ERJ3GEYJ822	M.RESISTOR CH 3W 8.2K	1	
R3824	ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R3825	ERJ3GEYJ101	M.RESISTOR CH 3W 100	1	
R3826,27	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R3901	ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R3902	ERJ3GEYJ682	M.RESISTOR CH 3W 6.8K	1	
VC3001	VCV0047	TRIMMER	1	
VC3201	VCV0047	TRIMMER	1	
VR3001	EVM7JGA00B54	V.RESISTOR 50K	1	
VR3002	EVM7JGA00B14	V.RESISTOR 10K	1	
VR3004	EVM7JGA00B53	V.RESISTOR 5K	1	
VR3005	EVM7JGA00B23	V.RESISTOR 2K	1	
VR3007	EVM7JGA00BE2	V.RESISTOR 220	1	
VR3201	EVM7JGA00B53	V.RESISTOR 5K	1	
VR3203	EVM7JGA00B23	V.RESISTOR 2K	1	
VR3204,05	EVM7JGA00B53	V.RESISTOR 5K	2	
VR3206,07	EVM7JGA00B23	V.RESISTOR 2K	2	
VR3402-04	EVM7JGA00B15	V.RESISTOR 100K	3	
VR3408-10	EVM7JGA00B15	V.RESISTOR 100K	3	
VR3426-28	EVM7JGA00B53	V.RESISTOR 5K	3	
VR3701	EVM7JGA00BE2	V.RESISTOR 220	1	
VR3702,03	EVM7JGA00B13	V.RESISTOR 1K	2	
X3001	VSX0567A	CRYSTAL OSCILLATOR	1	<R>
X3002	VSX0338	CRYSTAL OSCILLATOR	1	<R>
X3003	VSX0081	CRYSTAL OSCILLATOR	1	<R>
X3601	EF0V8004B0A	CRYSTAL OSCILLATOR	1	<R>
	VEP20490A	P.C.BOARD W/COMPONENT CAMERA PULSE		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			CAPACITORS		
C1		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C2		ECUX1H120JCV	C.CAPACITOR 50V 12P	1	
C3,C4		ECEV0JV101Q	E.CAPACITOR 6.3V 100U	2	
C5		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C6,C7		ECEV0JV101Q	E.CAPACITOR 6.3V 100U	2	
C8		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	1	
C9		ECUX1H390JCV	C.CAPACITOR 50V 39P	1	
C10		ECUX1H560JCV	C.CAPACITOR 50V 56P	1	
C11,12		ECUX1H680JCV	C.CAPACITOR 50V 68P	2	
C13,14		ECUX1H560JCV	C.CAPACITOR 50V 56P	2	
C15		ECUX1H103KBV	C.CAPACITOR 50V 0.01U	1	
C16		ECEV0JV220Q	E.CAPACITOR 6.3V 22U	1	
C17,18		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	2	
C19		ECEV0JV470Q	E.CAPACITOR 6.3V 47U	1	
C20		ECA0JFQ101	E.CAPACITOR 6.3V 100U	1	
C20		ECEV0JV220Q	E.CAPACITOR 6.3V 22U	1	
C21		ECUX1H100DCV	C.CAPACITOR 50V 10P	1	
C23,24		ECUX1H330JCV	C.CAPACITOR 50V 33P	2	
C25,26		ECEV0JV101Q	E.CAPACITOR 6.3V 100U	2	
C27		ECEV0JV220Q	E.CAPACITOR 6.3V 22U	1	
C28-35		ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	8	
C37		ECEV1CV470Q	E.CAPACITOR 16V 47U	1	
C39		ECEV1CV470Q	E.CAPACITOR 16V 47U	1	
C47-51		ECA0JFQ101	E.CAPACITOR 6.3V 100U	5	
D1-D6		MA151K	DIODE	6	<R>
D7,D8		MA329E	DIODE	2	<R>
IC1		MN5154-2	IC	1	<R>
IC2		MN5198	IC	1	<R>
IC3		MC74HC00AF	IC	1	<R>
IC4		MC74HC04AF	IC	1	<R>
IC5,C6		74AC04SJ	IC	2	<R>
IC7		74AC00SJ	IC	1	<R>
IC8		74AC08SJ	IC	1	<R>
IC9		74AC74SJ	IC	1	<R>
IC10		74AC04SJ	IC	1	<R>
IC11		TL062CPS	IC	1	<R>
L1-L3		VLQ0163J8R2	COIL 8.2UH	3	
P1		VJS3422B018	CONNECTOR (FEMALE)	1	
P2		VJP3550B030	CONNECTOR (MALE)	1	
Q1		2SK662-QR	TRANSISTOR	1	<R>
Q2		2SB956-QR	TRANSISTOR	1	<R>
Q3		2SD601A-R	TRANSISTOR	1	<R>
			RESISTORS		
R2,R3		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R5,R6		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R7		ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R9		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R10-19		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	10	
R22		ERJ3GEYJ562	M.RESISTOR CH 3W 5.6K	1	
R23		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R24		ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R25,26		ERJ3GEYJ153	M.RESISTOR CH 3W 15K	2	
R27		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R29		ERJ3GEYJ221	M.RESISTOR CH 3W 220	1	
R30		ERJ3GEYJ105	M.RESISTOR CH 3W 1M	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R31		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R32		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R34		ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R35		ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R36		ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R37		ERJ3GEYJ393	M.RESISTOR CH 3W 39K	1	
R38		ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R39		ERJ3GEYJ563	M.RESISTOR CH 3W 56K	1	
R40		ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R41		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R48		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R49-51		ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	3	
R52-54		ERJ3GEYJ123	M.RESISTOR CH 3W 12K	3	
R63-65		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R67		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R69,70		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
SW1		VSS0342	SWITCH	1	<R>
VL1		EIC5EB007A	PSC CPO;	1	
VR1		VRV0161B501	V.RESISTOR 500	1	
VR2-R6		VRV0161B102	V.RESISTOR 1K	5	
VR7-R9		EVM7DGA00B54	V.RESISTOR 50K	3	
		VEP20491A	P.C.BOARD W/COMPONENT		
			CAMERA DRIVE		
			CAPACITORS		
C501		ECEV1CV470Q	E.CAPACITOR 16V 47U	1	
C503		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C504		ECEV0JV470Q	E.CAPACITOR 6.3V 47U	1	
C505		ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C506		ECA1AFQ182	E.CAPACITOR 10V 1800U	1	
C508		ECEV0JV330Q	E.CAPACITOR 6.3V 33U	1	
C509		ECA1AFQ182	E.CAPACITOR 10V 1800U	1	
C510		ECEV1CV220Q	E.CAPACITOR 16V 22U	1	
C511		ECEV1CV470Q	E.CAPACITOR 16V 47U	1	
C513		ECEV1CV470Q	E.CAPACITOR 16V 47U	1	
C514		ECEV0GV101Q	E.CAPACITOR 4V 100U	1	
C515		ECEV0JV101Q	E.CAPACITOR 6.3V 100U	1	
C517,18		ECUX1H100DCV	C.CAPACITOR 50V 10P	2	
C520		ECEV0JV220Q	E.CAPACITOR 6.3V 22U	1	
C521		ECUX1H682KBV	C.CAPACITOR 50V 6800P	1	
C522		ECEV0JV220Q	E.CAPACITOR 6.3V 22U	1	
C523		ECUX1H682KBV	C.CAPACITOR 50V 6800P	1	
C524		ECEV0JV220Q	E.CAPACITOR 6.3V 22U	1	
C525		ECEV1EV220Q	E.CAPACITOR 25V 22U	1	
C526		ECEV1HV2R2Q	E.CAPACITOR 50V 2.2U	1	
C527-30		ECUX1H470JCV	C.CAPACITOR 50V 47P	4	
C531		ECEV1HV100Q	E.CAPACITOR 50V 10U	1	
C535-37		ECEV1CV470Q	E.CAPACITOR 16V 47U	3	
C538		ECEV0JV220Q	E.CAPACITOR 6.3V 22U	1	
C539		ECEV0JV101Q	E.CAPACITOR 6.3V 100U	1	
C540		ECEV0JV220Q	E.CAPACITOR 6.3V 22U	1	
C541		ECEV0JV101Q	E.CAPACITOR 6.3V 100U	1	
C543		ECEV1CV470Q	E.CAPACITOR 16V 47U	1	
C544		ECEV0JV220Q	E.CAPACITOR 6.3V 22U	1	
C545		ECEV1EV330Q	E.CAPACITOR 25V 33U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C546-49	ECUX1E104ZFV	C.CAPACITOR 25V 0.1U	4	
C550,51	ECUX1H100DCV	C.CAPACITOR 50V 10P	2	
C552-54	ECUX1H470JCV	C.CAPACITOR 50V 47P	3	
C555-57	ECEV1HN3R3S	E.CAPACITOR 50V 3.3U	3	
C559	ECUX1H682KBV	C.CAPACITOR 50V 6800P	1	
C560-63	ECA0JFQ101	E.CAPACITOR 6.3V 100U	4	
D501-04	MA152K	DIODE	4	<R>
D505	MA153	DIODE	1	<R>
D506-08	MA151K	DIODE	3	<R>
IC501,02	UPD16502GS	IC	2	<R>
IC503-06	74AC04SJ	IC	4	<R>
IC507,08	TL062CPS	IC	2	<R>
L501-04	VLP0147	COIL	4	
P501	VJS3550A030	CONNECTOR (FEMALE)	1	
P502	VJS3422B017	CONNECTOR (FEMALE)	1	
P503	VJS3422B016	CONNECTOR (FEMALE)	1	
Q501	2SB709A-R	TRANSISTOR	1	<R>
Q502	2SD1280-R	TRANSISTOR	1	<R>
Q503	2SD601A-R	TRANSISTOR	1	<R>
Q504	2SB709A-R	TRANSISTOR	1	<R>
Q506,07	2SC3734B24	TRANSISTOR	2	<R>
Q508	2SA1462Y34	TRANSISTOR	1	<R>
Q509	2SC3735B35	TRANSISTOR	1	<R>
Q510	2SB709A-R	TRANSISTOR	1	<R>
Q511	2SC3735B35	TRANSISTOR	1	<R>
Q512	2SB709A-R	TRANSISTOR	1	<R>
Q513	2SC3735B35	TRANSISTOR	1	<R>
Q514	2SB709A-R	TRANSISTOR	1	<R>
Q515-17	2SD601A-R	TRANSISTOR	3	<R>
Q518	2SD1280-R	TRANSISTOR	1	<R>
Q519	2SB709A-R	TRANSISTOR	1	<R>
Q520	2SB956-QR	TRANSISTOR	1	<R>
Q521	2SD601A-R	TRANSISTOR	1	<R>
Q522	2SB956-QR	TRANSISTOR	1	<R>
Q523	2SD601A-R	TRANSISTOR	1	<R>
		RESISTORS		
R502	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R503	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R504	ERJ3GEYJ471	M.RESISTOR CH 3W 470	1	
R505	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R506	ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R507	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R508	ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R509,10	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	2	
R511	ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R512	ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R516-21	ERJ3GEYJ101	M.RESISTOR CH 3W 100	6	
R522	ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R523,24	ERJ3GEYJ561	M.RESISTOR CH 3W 560	2	
R525	ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R526	ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	
R527	ERJ3GEYJ105	M.RESISTOR CH 3W 1M	1	
R528	ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	
R529	ERJ3GEYJ105	M.RESISTOR CH 3W 1M	1	
R530	ERJ3GEYJ272	M.RESISTOR CH 3W 2.7K	1	
R531	ERJ3GEYJ682	M.RESISTOR CH 3W 6.8K	1	
R532	ERJ3GEYJ470	M.RESISTOR CH 3W 47	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R533	ERJ3GEYJ105	M.RESISTOR CH 3W 1M	1	
R536	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R537	ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R538	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R539	ERJ3GEYJ222	M.RESISTOR CH 3W 2.2K	1	
R540	ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R541	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R542	ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R543	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R544	ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R545	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R546	ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R547	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R548	ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R549	ERJ3GEYJ103	M.RESISTOR CH 3W 10K	1	
R550	ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R551	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R552-54	ERJ3GEYJ105	M.RESISTOR CH 3W 1M	3	
R555-57	ERJ3GEYJ472	M.RESISTOR CH 3W 4.7K	3	
R558	ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R559	ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R560	ERJ3GEYJ182	M.RESISTOR CH 3W 1.8K	1	
R561	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R562	ERJ3GEYJ333	M.RESISTOR CH 3W 33K	1	
R563	ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R564	ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R565	ERJ3GEYJ153	M.RESISTOR CH 3W 15K	1	
R566	ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	1	
R567	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R568	ERJ3GEYJ393	M.RESISTOR CH 3W 39K	1	
R569	ERJ3GEYJ183	M.RESISTOR CH 3W 18K	1	
R570	ERJ3GEYJ563	M.RESISTOR CH 3W 56K	1	
R571	ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R572	ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R573	ERJ3GEYJ102	M.RESISTOR CH 3W 1K	1	
R574	ERJ3GEYJ563	M.RESISTOR CH 3W 56K	1	
R575	ERJ3GEYJ153	M.RESISTOR CH 3W 15K	1	
R576	ERJ3GEYJ473	M.RESISTOR CH 3W 47K	1	
R577	ERJ3GEYJ123	M.RESISTOR CH 3W 12K	1	
R578	ERJ3GEYJ223	M.RESISTOR CH 3W 22K	1	
R579	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R580	ERJ3GEYJ332	M.RESISTOR CH 3W 3.3K	1	
R582	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R589,90	ERJ3GEYJ122	M.RESISTOR CH 3W 1.2K	2	
R591,92	ERJ3GEYJ123	M.RESISTOR CH 3W 12K	2	
R601-06	ERJ3GEYJ101	M.RESISTOR CH 3W 100	6	
R607-09	ERJ3GEYJ470	M.RESISTOR CH 3W 47	3	
VR504-06	EVM7JGA00B54	V.RESISTOR 50K	3	
VR507-09	EVM7JGA00B24	V.RESISTOR 20K	3	
	VEP00U25A	P.C.BOARD W/COMPONENT		
		VTR START		
SW2	EVQQSB04B	SWITCH	1	<R>
	VEP00U26A	P.C.BOARD W/COMPONENT		
		BATTERY		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP86143A	P.C.BOARD W/COMPONENT		
			OPERATE		
D6001-03		BR1102W	DIODE	3	<R>
P501		VJP3125D010	CONNECTOR (MALE)	1	
SW6001-05		EVQPHB03T	SWITCH	5	<R>
		VEP00U21A	P.C.BOARD W/COMPONENT		
			MODE CHECK SW		
P9401		VJP1606T	CONNECTOR (MALE)	1	
SW9401		EVQQS205K	SWITCH	1	<R>
		VEP00U56A	P.C.BOARD W/COMPONENT		
			POWER SW		
P9400		VJP1607T	CONNECTOR (MALE)	1	
SW9400		VST0189	SWITCH	1	<R>
		VEP00U18A	P.C.BOARD W/COMPONENT		
			SUPER IRIS		
D9100		MA151WK	DIODE	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
SW9100		EVQQS307K	SWITCH	1	<R>
SW9101		EVQQS205K	SWITCH	1	<R>
		VEP00U19A	P.C.BOARD W/COMPONENT		
			MONITOR VR		
VR9200		VRV0080	V.RESISTOR	1	
		VEP00U20A	P.C.BOARD W/COMPONENT		
			TOGGLE SW		
D9300,01		MA151WK	DIODE	2	<R>
P9300		VJP1612T	CONNECTOR (MALE)	1	
SW9300,01		VST0188	SWITCH	2	<R>
SW9302		VST0187	SWITCH	1	<R>
SW9303		VST0188	SWITCH	1	<R>
W9301-05		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	5	
		VEP06956A	P.C.BOARD W/COMPONENT		
			LCD		
			CAPACITORS		
C6901		ECEA0JKS330	E.CAPACITOR 6.3V 33U	1	
C6902		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C6911		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C6912		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C6913,14		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	2	
C6915		ECEA1EKS220I	E.CAPACITOR 25V 22U	1	
C6916		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C6917		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C6918		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C6919,20		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C6921		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C6923	ECEA1AKS101I	E.CAPACITOR 10V 100U	1	
C6924	ECUM1E563KBN	C.CAPACITOR CH 25V 0.056U	1	
C6925	ECEA0JKS101	E.CAPACITOR 6.3V 100U	1	
C6926	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C6927	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C6928-32	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	5	
D6901	MA151K	DIODE	1	<R>
D6902	MA151WK	DIODE	1	<R>
D6904-06	MA151WK	DIODE	3	<R>
D6907	MA151K	DIODE	1	<R>
D6908	HZ16-1L	DIODE	1	<R>
D6909	MA704	DIODE	1	<R>
D6910	LN1236CP4	DIODE	1	<R>
D6911	MA151WK	DIODE	1	<R>
D6912-22	MA151K	DIODE	11	<R>
D6923,24	MA167	DIODE	2	<R>
IC6901	D75308BGF132	IC	1	<R>
IC6902	MN12821	IC	1	<R>
IC6903	S81350HG	IC	1	<R>
IC6904	NJU7112AM	IC	1	<R>
IC6905	NJM386M	IC	1	<R>
IC6906	NJM4558M	IC	1	<R>
LCD6901	EDD085Y88A4P	LCD	1	
P6901	VJP3095	CONNECTOR (MALE)	1	
P6902	VJP1606T	CONNECTOR (MALE)	1	
P6903	VJP1986T	CONNECTOR (MALE)	1	
Q6901,02	2SD968-RS	TRANSISTOR	2	<R>
Q6903	2SD602A-S	TRANSISTOR	1	<R>
Q6904	2SD1328-R	TRANSISTOR	1	<R>
QR6901	UN2113	TRANSISTOR-RESISTOR	1	<R>
		RESISTORS		
R6901	ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	1	
R6902	ERJ6GEYJ471	M.RESISTOR CH1/16W 470	1	
R6903-10	ERJ6GEYJ102	M.RESISTOR CH1/16W 1K	8	
R6911-18	ERJ6GEYJ823	M.RESISTOR CH1/16W 82K	8	
R6919	ERJ6GEYJ334	M.RESISTOR CH1/16W 330K	1	
R6920	ERJ6GEYJ392	M.RESISTOR CH1/16W 3.9K	1	
R6924	ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	1	
R6925	ERJ6GEYJ101	M.RESISTOR CH1/16W 100	1	
R6926	ERJ8GCYJ223	M.RESISTOR CH 1/8W 22K	1	
R6927	ERJ6GEYG304	M.RESISTOR CH1/16W 300K	1	
R6928	ERJ6GEYG473	M.RESISTOR CH1/16W 47K	1	
R6929	ERJ6GEYG563	M.RESISTOR CH1/16W 56K	1	
R6930	ERJ6GEYG472	M.RESISTOR CH1/16W 4.7K	1	
R6931	ERJ6GEYG563	M.RESISTOR CH1/16W 56K	1	
R6932	ERJ6GEYG155	M.RESISTOR CH1/16W 1.5M	1	
R6933	ERJ6GEYJ103	M.RESISTOR CH1/16W 10K	1	
R6934	ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	1	
R6935-37	ERJ6GEYJ223	M.RESISTOR CH1/16W 22K	3	
R6938	ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	1	
R6939	ERJ6GEYJ103	M.RESISTOR CH1/16W 10K	1	
R6940	ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	1	
R6941	ERJ6GEYJ103	M.RESISTOR CH1/16W 10K	1	
R6942	ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R6943	ERJ6GEYJ103	M.RESISTOR CH1/16W 10K	1	
R6945	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R6946-48	ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	3	
R6949	ERJ6GEYJ101	M.RESISTOR CH1/16W 100	1	
R6950	ERJ6GEYJ102	M.RESISTOR CH1/16W 1K	1	
R6951	ERJ6GEYJ101	M.RESISTOR CH1/16W 100	1	
R6956	ERJ6GEYJ102	M.RESISTOR CH1/16W 1K	1	
R6957,58	ERJ8GCYJ122	M.RESISTOR CH 1/8W 1.2K	2	
R6959	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R6960-65	ERJ8GCYJ122	M.RESISTOR CH 1/8W 1.2K	6	
R6966	ERJ6GEYJ332	M.RESISTOR CH1/16W 3.3K	1	
R6967	ERJ6GEYJ223	M.RESISTOR CH1/16W 22K	1	
R6968	ERJ6GEYJ103	M.RESISTOR CH1/16W 10K	1	
R6969	ERJ6GEYJ222	M.RESISTOR CH1/16W 2.2K	1	
R6970,71	ERJ6GEYJ101	M.RESISTOR CH1/16W 100	2	
R6972-75	ERJ6GEYJ150	M.RESISTOR CH1/16W 15	4	
R6976	ERJ6GEYJ103	M.RESISTOR CH1/16W 10K	1	
R6977,78	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R6980,81	ERJ6GEYJ473	M.RESISTOR CH1/16W 47K	2	
R6982,83	ERJ6GEYJ104	M.RESISTOR CH1/16W 100K	2	
R6984	ERJ6GEYJ683	M.RESISTOR CH1/16W 68K	1	
R6985,86	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
SW6901	VSS0186	SWITCH	1	<R>
SW6902	VSS0187	SWITCH	1	<R>
SW6903	VSS0186	SWITCH	1	<R>
SW6904	VSS0187	SWITCH	1	<R>
SW6905	VSS0186	SWITCH	1	<R>
SW6906	EVQQS205K	SWITCH	1	<R>
SW6907-10	EVQQSB04B	SWITCH	4	<R>
SW6911,12	VSS0187	SWITCH	2	<R>
SW6913	VSS0186	SWITCH	1	<R>
SW6914	VSS0187	SWITCH	1	<R>
VR6901,02	VRV0080	V.RESISTOR	2	
W90-99	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	10	
W100-02	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	3	
W106	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
W109-14	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	6	
W116,17	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
W118	ERJ8GCY0R00	M.RESISTOR CH 1/8W 0	1	
W119,20	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
W121,22	ERJ8GCY0R00	M.RESISTOR CH 1/8W 0	2	
W123	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
W124,25	ERJ8GCY0R00	M.RESISTOR CH 1/8W 0	2	
W126-28	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	3	
W129	ERJ8GCY0R00	M.RESISTOR CH 1/8W 0	1	
W130,31	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
W132-53	ERJ8GCY0R00	M.RESISTOR CH 1/8W 0	22	
W154-58	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	5	
W159-61	ERJ8GCY0R00	M.RESISTOR CH 1/8W 0	3	
W162	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
W163	ERJ8GCY0R00	M.RESISTOR CH 1/8W 0	1	
W164-71	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	8	
W172-76	ERJ8GCY0R00	M.RESISTOR CH 1/8W 0	5	
W177,78	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
W179-92	ERJ8GCY0R00	M.RESISTOR CH 1/8W 0	14	
W193	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
W194-01	ERJ8GCY0R00	M.RESISTOR CH 1/8W 0	8	
W202	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
W203-09	ERJ8GCY0R00	M.RESISTOR CH 1/8W 0	7	
W210	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
W211-15	ERJ8GCY0R00	M.RESISTOR CH 1/8W 0	5	
W216-18	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	3	
W219	ERJ8GCY0R00	M.RESISTOR CH 1/8W 0	1	
W220-24	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	5	
W225	ERJ8GCY0R00	M.RESISTOR CH 1/8W 0	1	
W226,27	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
W228	ERJ8GCYOROO	M.RESISTOR CH 1/8W 0	1	
W229	ERJ6GEYOROO	M.RESISTOR CH 1/10W 0	1	
W230-32	ERJ8GCYOROO	M.RESISTOR CH 1/8W 0	3	
W233	ERJ6GEYOROO	M.RESISTOR CH 1/10W 0	1	
W239	ERJ6GEYOROO	M.RESISTOR CH 1/10W 0	1	
W241,42	ERJ8GCYOROO	M.RESISTOR CH 1/8W 0	2	
W243	ERJ6GEYOROO	M.RESISTOR CH 1/10W 0	1	
W245	ERJ6GEYOROO	M.RESISTOR CH 1/10W 0	1	
W267-72	ERJ8GCYOROO	M.RESISTOR CH 1/8W 0	6	
W273	ERJ6GEYOROO	M.RESISTOR CH 1/10W 0	1	
W274	ERJ8GCYOROO	M.RESISTOR CH 1/8W 0	1	
W275-77	ERJ6GEYOROO	M.RESISTOR CH 1/10W 0	3	
X6901	VSX0140	CRYSTAL OSCILLATOR	1	<R>
X6902	VSX0094	CRYSTAL OSCILLATOR	1	<R>
	VEP00U22A	P.C.BOARD W/COMPONENT		
		GENLOCK		
P9500	VJP1602T	CONNECTOR (MALE)	1	
SW9500,01	ESD1111212	SWITCH	2	<R>
VR9500,01	VRV0109B103	V.RESISTOR 10K	2	
	VEP00U23A	P.C.BOARD W/COMPONENT		
		CAMERA OUT		
J1,J2	VJS3154	CONNECTOR (FEMALE)	2	
L9601	VLP0083	COIL	1	
P9600	VJP1608T	CONNECTOR (MALE)	1	
		RESISTORS		
R9601	ERDS2TJ750	C.RESISTOR 1/4W 75	1	
	VEK5868	P.C.BOARD W/COMPONENT		
		FE HEAD		

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
		CAPACITORS		
C1901	ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C1902	VCYD1E103MR	S.CAPACITOR 25V 0.01U	1	
C1903	VCYD1E682KH	S.CAPACITOR 25V 6800P	1	
C1904	ECQV1H563JZ	P.CAPACITOR 50V 5600P	1	
L1901	VLQEL05F221K	COIL 220UH	1	
Q1901	2SC2603AE2F	TRANSISTOR	1	<R>
		RESISTORS		
R1901	ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
T1901	VLQ0586	COIL	1	
	VEP03B06A	P.C.BOARD W/COMPONENT		
		RT FPC		
	VEK6035	P.C.BOARD W/COMPONENT		
		PHOTO HOLDER (L)		
	VEK6098	P.C.BOARD W/COMPONENT		
		PHOTO HOLDER (R)		
	VEP27089A	P.C.BOARD W/COMPONENT		
		FRONT		
	VMX1658	SPACER	2	
	VEP27090A	P.C.BOARD W/COMPONENT		
		CRT MASK		
	VJF0900	HOLDER	1	
	XTN2+4G	SCREW	2	
	VEP01585B	P.C.BOARD W/COMPONENT		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			JACK		
		VEP00U89A	P.C.BOARD W/COMPONENT		
			AUDIO OUT		
		VMP3789	P.C.B. HOLDER ANGLE	1	
		XYN26+K6	SCREW	1	
		XWGV3Z8G	WASHER	2	
		VEP00U51A	P.C.BOARD W/COMPONENT		
			DC INPUT		
		VJP2717	CONNECTOR (MALE)	1	
		VEP01584A	P.C.BOARD W/COMPONENT		
			POWER		
		VSC4018	SHIELD CASE (UPPER)	1	
		VSC4040	SHIELD CASE (LOWER)	1	
		VMZ2272	BARRIER	1	
		VMZ2283	BARRIER	1	
		VEP03B01A	P.C.BOARD W/COMPONENT		
			VIDEO		
		VEP00U81A	P.C.BOARD W/COMPONENT		
			VIDEO SUB		
		VMZ2259	BARRIER	1	
		VSC4015	SHIELD CASE	1	
		VEP04442B	P.C.BOARD W/COMPONENT		
			AUDIO & SYSCON		
		VMX1183	SPACER	1	
		VMZ2296	BARRIER	1	
		VEP06957A	P.C.BOARD W/COMPONENT		
			MECHA INTERFACE		
		VMX2320	SPACER	1	
		VMX2321	SPACER	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP00U25A	P.C.BOARD W/COMPONENT		
			VTR START		
		VST0190	SWITCH	1	
		VEP00U26A	P.C.BOARD W/COMPONENT		
			BATTERY		
		VEK5717	BRAKE SOLENOID	1	
		VEP00U18A	P.C.BOARD W/COMPONENT		
			SUPER IRIS		
		VGQ3417	BUTTON SUPPORT (A)	1	
		VGQ3418	BUTTON SUPPORT (B)	1	
		VEP00U20A	P.C.BOARD W/COMPONENT		
			TOGGLE SW		
		VMP4267	P.C.B. HOLDER ANGLE	1	
		VEP06956A	P.C.BOARD W/COMPONENT		
			LCD		
		VGQ3415	BUTTON SUPPORT PLATE	1	
		VGQ3417	BUTTON SUPPORT (A)	1	
		VWJ03CN060CC	FLEXIBLE CABLE	2	
		VEP00U23A	P.C.BOARD W/COMPONENT		
			CAMERA OUT		
		VMP4263	P.C.B. HOLDER ANGLE	1	
		XYN3+C6FCS	SCREW	2	
		VEP03B06A	P.C.BOARD W/COMPONENT		
			RT FPC		

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	VJF1093	HOLDER	1	
	VEK6035	P.C.BOARD W/COMPONENT		
		PHOTO HOLDER (L)		
	PN158NVNC	PHOTO TR	1	
	VMD0607	PHOTO HOLDER (L)	1	
	VSH0026	REAF SW	1	
	VEK6098	P.C.BOARD W/COMPONENT		
		PHOTO HOLDER (R)		
	PN158NV	PHOTO TR	1	
	VMD0606	PHOTO HOLDER (R)	1	
	VSQ0808	DEW SENSOR	1	
	VES0690	DETECT SWITCH	1	
E37	VES0689	MECHANISM CONNECTION C.B.A.		
		(MODE SELECT SWITCH UNIT)		
Q1401	ON2170	PHOTO COUPLER	1	<R>
P1401	VJP3318A008	CONNECTOR (MALE) 8P	1	
P1402	VJP1229R	CONNECTOR (MALE) 2P	1	
		MISCELLANEOUS		
	VEE2015	CABLE	1	(P1402-P6009)
	VMX1280	SENSOR SPACER	1	

⚠ Warning

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advice non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service manual by anyone else could result in serious injury or death.

Order No. VSD9506S207
D4

Service Manual

Supplement

NTSC / PAL **Video Product**

Subject : Change of Coil

Please use this supplement together with the Service Manual as follows :

Model No.	Bulletin No.	Order No.	Effective from
AG-DP800P V 16695	53	VSD9406M252A/B	A5 - - -
AG-DP800E/EG	40	VSD9408M636A/B	A5 - - -

Board: REAR JACK C.B.A.

Reason for Change

- ☐ The following part(s) has(have) been changed for serviceability improvement.
- ■ The following part(s) has(have) been changed for productivity improvement.
- ☐ The following part(s) has(have) been changed for standardization.
- ☐ The following part(s) has (have) been changed for the safety regulation.
- ☐

Interchangeability Code (I/C)

A	Original or new parts may be used in early or late production set. Use original parts until exhausted, then stock new parts.
B	Original parts may be used in early production sets only. New parts may be used in early or late production sets. Use original parts possible then stock new parts.
C	New parts only may be used in early or late production sets.
D	Original parts may be used in early production sets only. New parts may be used in late production sets only. Stock both original and new parts.
E	Others

Part Number

Ref. No.	Original Part No.	New Part No.	Part Name & Descriptions	Pcs	I/C	Remarks
L1009	VLQ047680K	VLQ0621	COIL	1	C	

Panasonic

© 1995 Matsushita Electric Industrial Co., Ltd. All rights reserved.
Unauthorized copying and distribution is a violation of law.

695

! Warning

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advice non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service manual by anyone else could result in serious injury or death.

Order No. VSD9609S202
D4

Service Manual

Supplement

NTSC / PAL Video Product

Subject :Audio Noise with Unbalanced Microphone

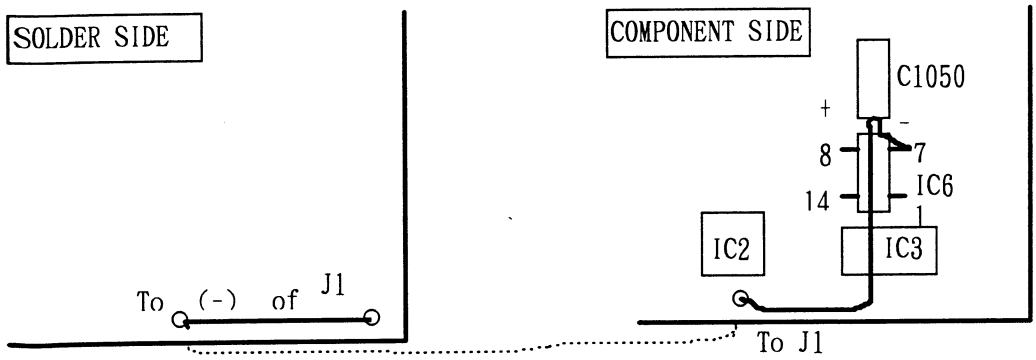
Please use this supplement together with the Service Manual as follows :

Model No.	Bulletin No.	Order No.	Effective from
AG-DP800HP	60	VSD9406M252	E6----
AG-DP800HE	50	VSD9408M636	E6-----
AG-DP800HEG	47	VSD9408M636	E6-----

Board: JACK

When an unbalanced microphone is connected, the audio input circuit may generate noise. In order to prevent this, the following modifications have been introduced.

1. Capacitor C1040 has been deleted.
2. Resistor R1079 has been changed.
3. Capacitor C1050 has been added as shown below.



Interchangeability Code (I/C)

A	Original or new parts may be used in early or late production set. Use original parts until exhausted, then stock new parts.
B	Original parts may be used in early production sets only. New parts may be used in early or late production sets. Use original parts possible then stock new parts.
C	New parts only may be used in early or late production sets.
D	Original parts may be used in early production sets only. New parts may be used in late production sets only. Stock both original and new parts.
E	Others

Part Number

Ref. No.	Original Part No.	New Part No.	Part Name & Descriptions	Pcs	I/C	Remarks
C1040	ECA1JFQ220	DELETED	DELETED	0	E	
C1050	-------	ECA1JFQ820	E.CAPACITOR 63V 82U	1	C	
R1079	ERJ8GCYJ101	ERJ8GCYJ331	M.RESISTOR CH 1/8W 330	1	C	

TE2-4505

Panasonic

© 1996 Matsushita Electric Industrial Co., Ltd. All rights reserved.
Unauthorized copying and distribution is a violation of law.

V/16695

ORDER NO. VSD9406D210
D4

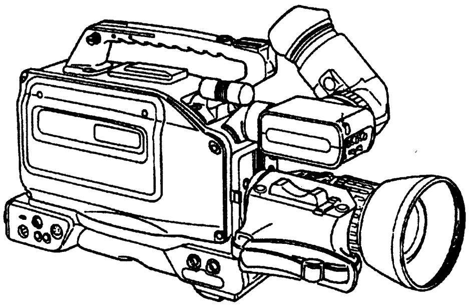
Service Manual

Supplement

Camera /VTR

AG-DP800

(NTSC / PAL)



Subject: Technical Descriptions

Panasonic®

© 1996 Matsushita Electric Industrial Co., Ltd. All rights reserved.
Unauthorized copying and distribution is a violation of law.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advice non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service manual by anyone else could result in serious injury or death.

INTRODUCTION

This Supplement Service Manual contains the technical description which service personnel to understand and service the Panasonic S-VHS Camera／VTR model AG-DP800.

Please use this service manual together with the Service Manual as following order number.
For the AG-DP800P／HP : Order No. VSD9406M252A,B,C.
For the AG-DP800E／EG／HE／HEG : Order No. VSD9408M636A,B,C.

CONTENTS

1. CAMERA SECTION 1
GENERAL DESCRIPTION 1
DETAILED DESCRIPTION 2
1-1. OPTICAL SYSTEM (LENS AND FILTERS STACK 2
1-2. CCD (CHARGE COUPLED DEVICE) IMAGE SENSOR 4
1-3. CCD DRIVE CIRCUIT 8
1-4. PRE-AMPLIFIER CIRCUIT 12
1-5. ANALOG PRE-PROCESS (APP) CIRCUIT 13
1-6. DIGITAL SIGNAL PROCESS (DSP) CIRCUIT 16
1-7. ENCODER CIRCUIT 20
1-8. SYNC GENERATOR CIRCUIT 20

2. VIDEO CIRCUIT 23
GENERAL DESCRIPTION 23
2-1. LUMINANCE CIRCUIT OPERATION 24
2-2. LUMINANCE PLAYBACK OPERATION 27
2-3. CHROMINANCE CIRCUIT OPERATION 29
2-4. CHROMINANCE PLAYBACK OPERATION 32

1. CAMERA SECTION

A new digital signal processing technology has been developed for use in the AG-DP800 3CCD Camera/VTR. The camera section within the AG-DP800 offers high sensitivity, high resolution, high signal to noise ratio and low smear characteristics. The camera employs a precise, high resolution prism system, utilizing 1/2" FIT CCDs that results in excellent picture quality, offering users more than 700 lines (AG-DP800H is 750 lines) of horizontal resolution. The NTSC model has 380,000 pixels and the PAL model uses 450,000 pixels.

[General Description]

This section is divided into five sections as shown in the simplified block diagram below.

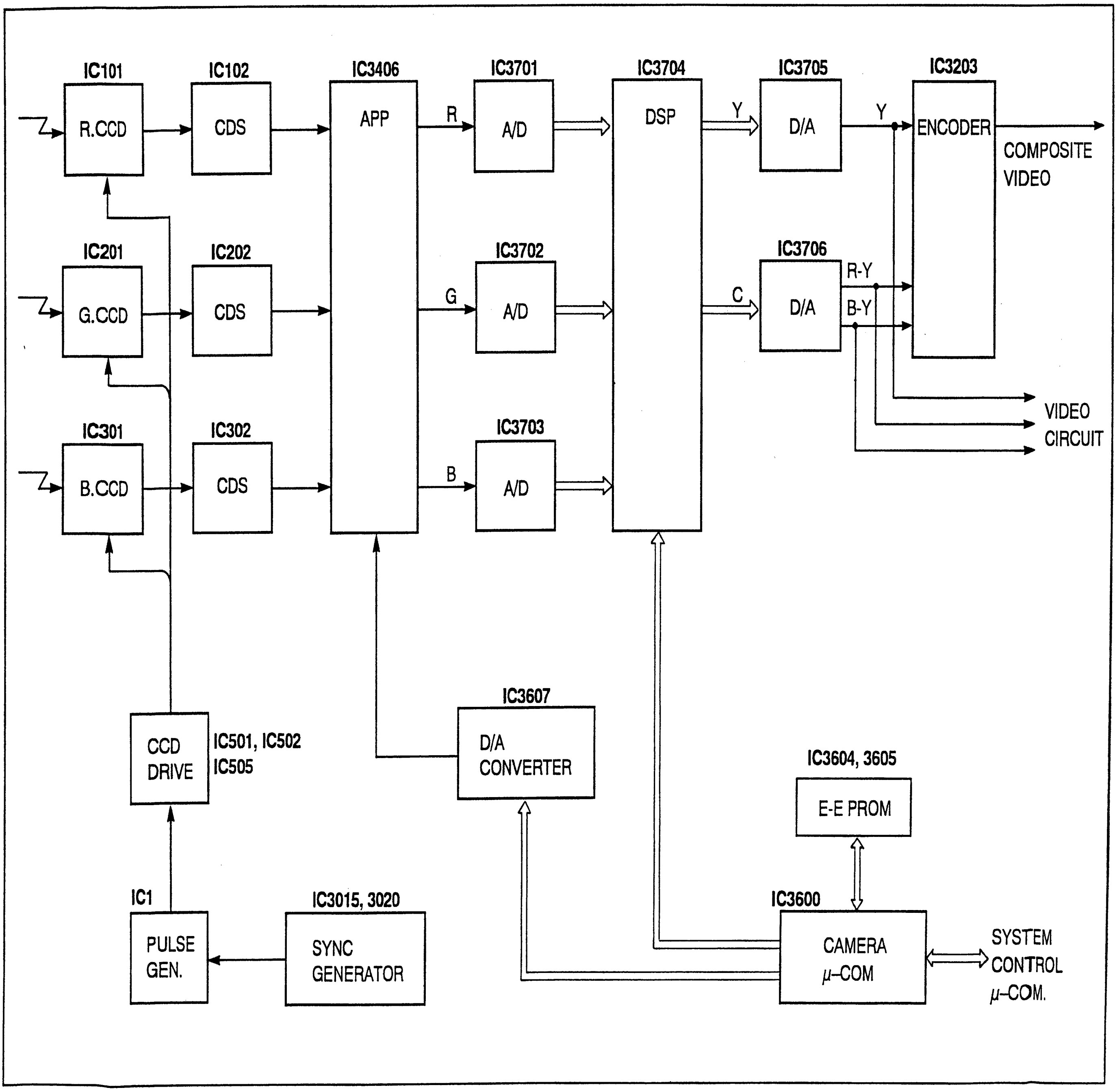

IC101
R.CCD
IC102
CDS
IC3406
APP
R
IC3701
A/D
IC3704
DSP
Y
IC3705
D/A
Y
IC3203
ENCODER
COMPOSITE VIDEO
IC201
G.CCD
IC202
CDS
G
IC3702
A/D
C
IC3706
D/A
R-Y
B-Y
IC301
B.CCD
IC302
CDS
B
IC3703
A/D
VIDEO CIRCUIT
IC3607
D/A CONVERTER
CCD DRIVE
IC501, IC502
IC505
IC3604, 3605
E-E PROM
IC1
PULSE GEN.
IC3015, 3020
SYNC GENERATOR
IC3600
CAMERA μ-COM
SYSTEM CONTROL μ-COM.

Figure C1 Simplified Block Diagram for Camera Section

1) Optical and CCD
2) Analog Pre-Process Circuit (APP)
3) Digital Signal Process Circuit (DSP)
4) Encoder Circuit
5) System Control Circuit (Camera MPU)

1) Optical and CCD

This section is comprised of the lens, filter, prism and CCDs. The combination of these helps decide the camera's specification. This camera uses the 3 FIT (Frame Interline Transfer) CCDs.
Light entering the camera is focused by the lens and is passed through filters to correct color temperature. Next the prism separates the light into the primary colors (Red, Green and Blue) and transmits each color to the appropriate CCD.

2) Analog Pre-Process (APP)

This circuit provides the OB, AWB, AGC and Pre-Knee / Gamma correction to the incoming signal before the signal is digitized and processed in next section.

3) Digital Signal Process (DSP)

This circuit uses digital techniques to improve the quality of the picture and stability. After the APP section, the signal is A/D converted and supplied to DSP section.
The DSP circuit provides the H / V Detail, Auto Knee, Coring and color bar generator. Within the DSP circuit, the R G B signal is decoded to Y, R-Y, B-Y and is D/A converted for encoding.

4) Encoder

The encoder combines the Y, R-Y and B-Y signals into the composite video signal and applies it to both the camera video out and 26 pin VTR out connectors.

5) Camera System Control (Camera MPU)

The camera has it's own microprocessor that generates control signals for both the analog (APP) and digital (DSP) processing circuits. Two EE PROMs (Electrical Erasable Program Read Only Memory) that store scene file, adjustments value and hour meter data.
These devices reduce the number of potentiometer (variable resistor) adjustments which results in a lighter and more reliable camera.

[Detailed Description]

1-1. Optical System (Lens and Filters stack)

The filters composed of four elements: IR filter, ND filter, Color conversion filter and Crystal filter.

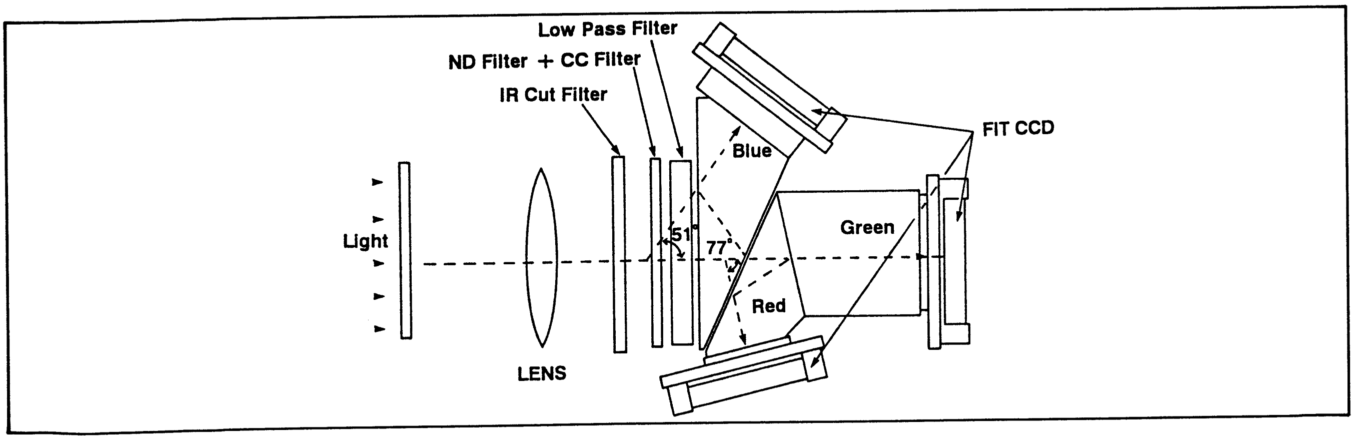


Figure C2 Optical Assembly

1) IR (Infrared Cut) Filter

The CCD are very sensitive to infrared light. If this light is not filtered out before it reaches the CCD image sensor, this will result in poor color reproduction (especially at low luminance levels).
The IR filter is placed in the first row of filters after the lens and serves to reduce infrared rays as shown in Figure C3. This filter also offers protection against the ingress of dust.

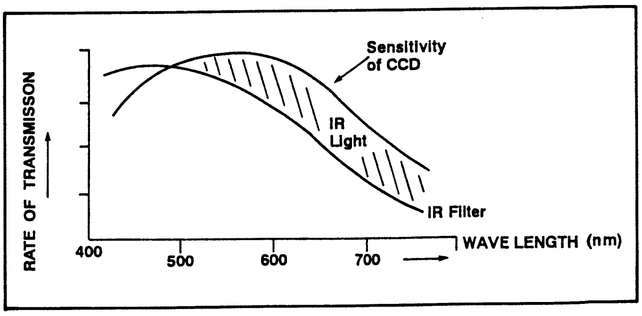


Figure C3 IR Cut Filter Characteristics

2) Color Temperature Conversion Filter (CC filter)

The camera is normally adjusted for standard color temperature of 3,200K illumination. If the color temperature exceeds 3,200K (such as outdoor light 5,600K), the reproduced image will have a bluish tint to it. If the color temperature is less than 3,200K (such as low light situations), the reproduced image will have a reddish tint to it.
This camera is equipped with two CC filters to correct the color temperature of the scene to 3,200K. The available settings are shown in below.

FILTER No.	COLOR CONVERSION	SOURCE CONDITION
1	3,200K	HALOGEN or TUNGSTEN LAMP
2	5,600K+1/8ND	DAY LIGHT (SUNNY)
3	5,600K	DAY LIGHT (CLOUDY)

3) Neutral Density (ND) Filter

This camera is designed to handle a light intensity of 2,000 lux / F8.0. When an object has light intensity which exceeds this value, the ND filter can be used to reduce it to level which the iris can handle. This 1/8 ND filter is active when filter number 2 is selected.

4) Optical Low Pass Filter (Crystal Filter)

As shown in Figure C4, it can be seen that the CCDs have a frequency response which dips sharply at 6.75MHz. The CCD elements effectively sample the image at 13.5MHz (380,000 samples per field for NTSC, 450,000 for PAL). Any light response above 6.75MHz will cause aliasing and moiré patterning.
This filter consists of four elements, each cut as a different angle low pass filter, resulting in a filter cutoff of 6.75MHz. The cuts and overall response are shown in Figure C5.

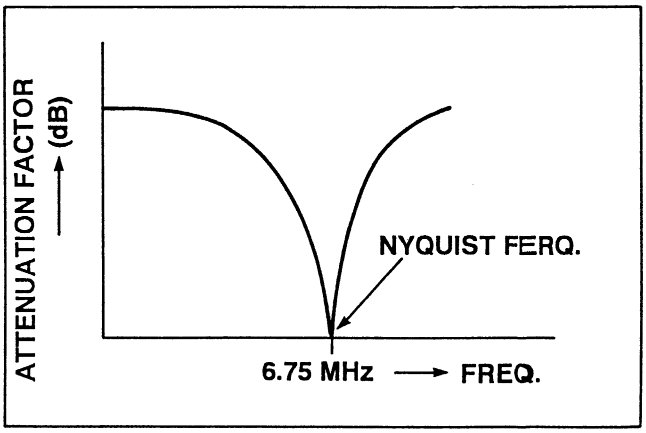
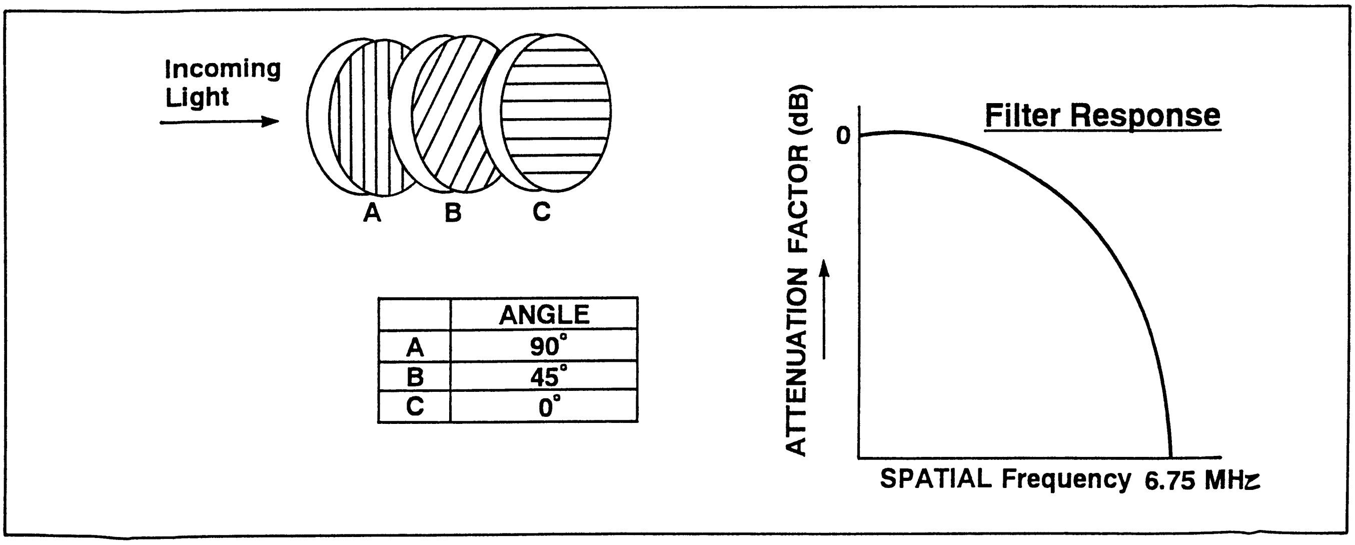


Figure C4 CCD Frequency Response



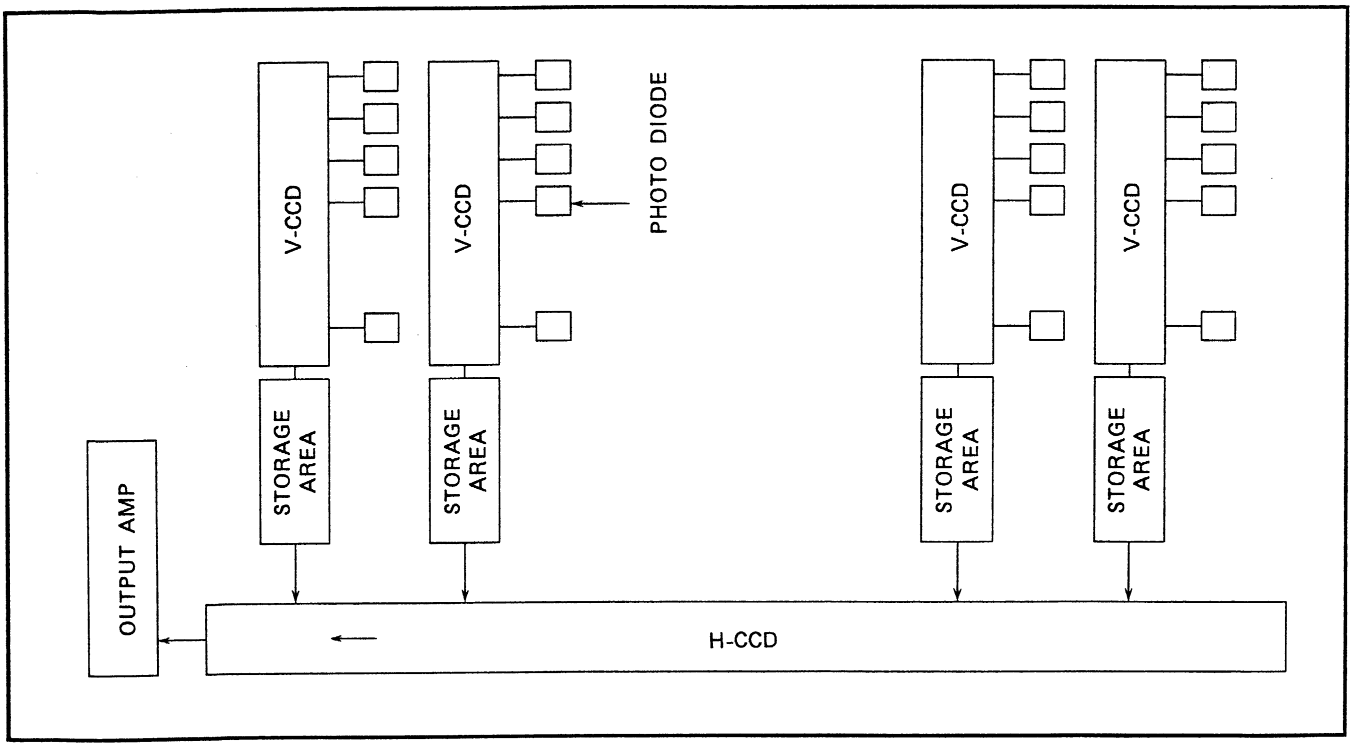
	ANGLE
A	90°
B	45°
C	0°

Figure C5 Crystal Filter Construction

1-2. CCD (Charge Coupled Device) Image Sensor

1) Structure of FIT CCD

The CCD can be thought of an integrated circuit (IC) with an optical window as shown in Figure C6.


V-CCD
V-CCD
PHOTO DIODE
V-CCD
V-CCD
STORAGE AREA
STORAGE AREA
STORAGE AREA
STORAGE AREA
OUTPUT AMP
H-CCD

	NTSC MODEL	PAL MODEL
Picture Element	380,000	450,000
Horizontal Picture Pixel	726	716
Vertical Picture Pixel	492	582
Storage Area	500	590

Figure C6 Structure of FIT CCD

2) CCD Classification

There are three types of CCDs: Interline Transfer (IT), Frame Transfer (FT) and Frame Interline Transfer (FIT). The unit uses FIT type CCD. The different characteristics of these types of CCDs are explained in Figure C7.

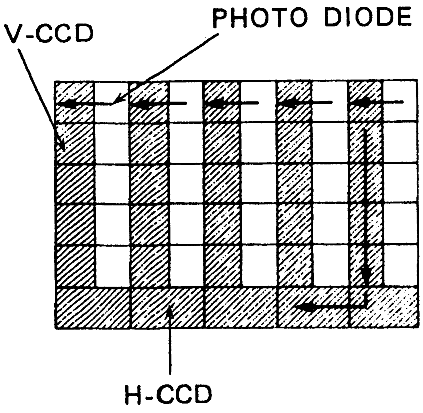
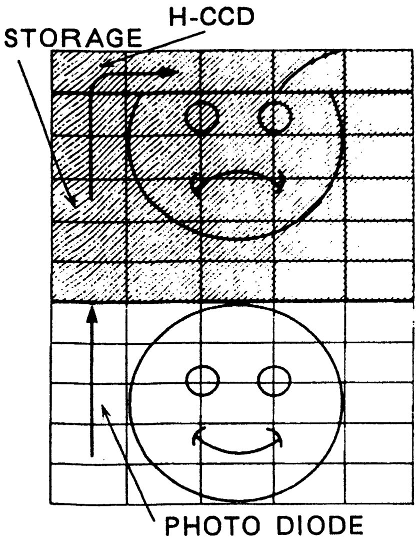
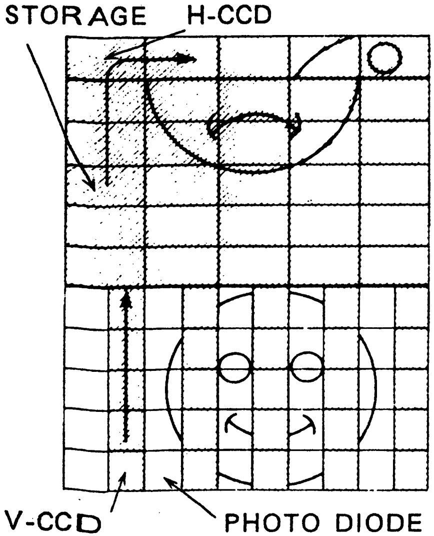
TYPE OF CCD	ACTION	FEATURE
IT (INTERLINE TRANSFER)CCD  	It consists of PDs, V-CCDs and H-CCD. 1. Photo diode converts the light into a change corresponding to the level of incoming light. 2. V-CCD accumulates the charge from photo diodes and transfers the charge in a vertical direction to H-CCD. 3. H-CCD transfers the charge in a horizontal direction to the output.	＊Chip size is small against FIT ＊Low sensitivity ＊Output has a false signal a lot ＊There is little smear (it level is less than FT)
FT (FRAME TRANSFER)CCD  	It consists of PDs, storage and H-CCD. 1. Photo diode converts the light into a charge corresponding to the level of incoming lignt and then vertically transfer all the chage in parallel to storage. 2. Storage transfers the change in a vertical direction to H-CCD. 3. H-CCD transfers the charge in a horizontal direction to the output.	＊Chip size is small against FT ＊High sensitivity ＊Blue is week in the sensitivity ＊Output has a smear a lot
FIT (FRAME INTERLINE TRANSFER)CCD  	It consists of PDs, V-CCDs, Storage and H-CCDs. 1. Photo diode converts the light into a charge corresponding to the level of imcoming light. 2. V-CCD accumulates the charge from photo diode and instantly transfers all the charge in a vertical direction and in parallel, to storage. 3. Strage transfers the charge in a horizontal direction to the output.	＊Chip size is big against IT, FT ＊Low sensitivity ＊Output has a false signal a lot ＊Low smear

Figure C7 CCD Classification

3) Spatial Offsets of CCD

The spatial offset is a method used to improve the horizontal luminance resolution of the CCD. The CCDs are aligned on the prism assemblies with horizontally offset of 1/2 pixel distance between the green element and red & blue elements. The red and blue elements are aligned to same axis. (see Figure C8). The luminance signal is generated by mixing the 3 signals in the following ratio;

$Y=0.3R + 0.59G + 0.11B$

If the red and blue photo diodes are aligned between the green photo diode, the sampling points becomes twice that of the luminance signal (see Figure C9). A theoretical doubling of the horizontal resolution is possible using this technique. In fact, an increase of approximately 1.3 to 1.5 times the monochrome resolution due to mixing the red, green and blue signals.

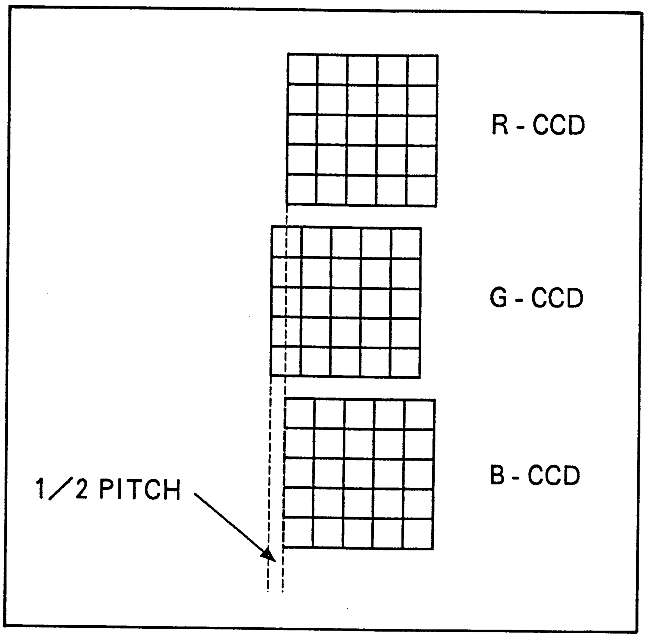


Figure C8 CCD Spatial Offsets (1)

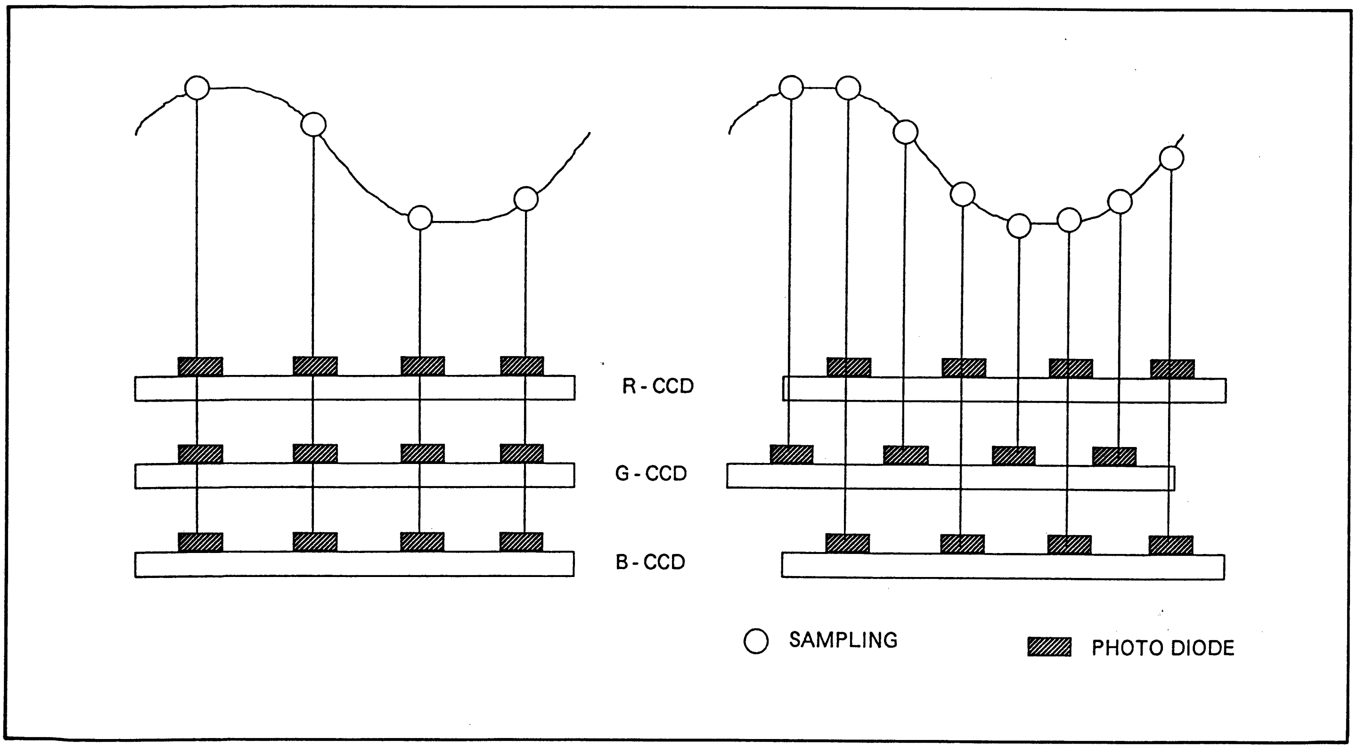


Figure C9 CCD Spatial Offsets (2)

4) CCD Charge Transfer Method

For interline transfer of the CCD, there are two charge methods for signal generation. One is field mode, the other is frame mode.

In the AG-DP800, the charge on the pixels are transferred to the shift register at field rate (60Hz for NTSC, 50 Hz for PAL). The charge transfer process is shown in Figure C10.

a. The photo diode converts light into a charge which is proportional to the incoming light intensity as shown in Figure C10-(1).

b. The charge is instantly transferred to the V-CCD from all the photo diodes at the same times shown in Figure C10-(2).

c. The charges are mixed during the vertical blanking period. In an odd field, the charge GV3 moves down to GV1 thru GV4 and the charge are mixed. This mixed charge comprises one picture element of the TV scan line as shown in Figure C10-(3).
There are 492 vertical array of photo diodes for NTSC (582 arrays for PAL), the 246 picture elements for NTSC (291 array for PAL) are produced in the each V-CCD at this time.
Finally, the V-CCDs transfer the charge (in parallel) to a storage area. This charge in the storage area is then transferred to H-CCD and generates each TV field scanning signal.

d. In the even field, the charge of GV1 moves down to GV3 thru GV2 and charges are mixed the same as in the odd field description above. The charge mixing is alternates every field to achieve interlace scanning, as shown in Figure C10-(4).

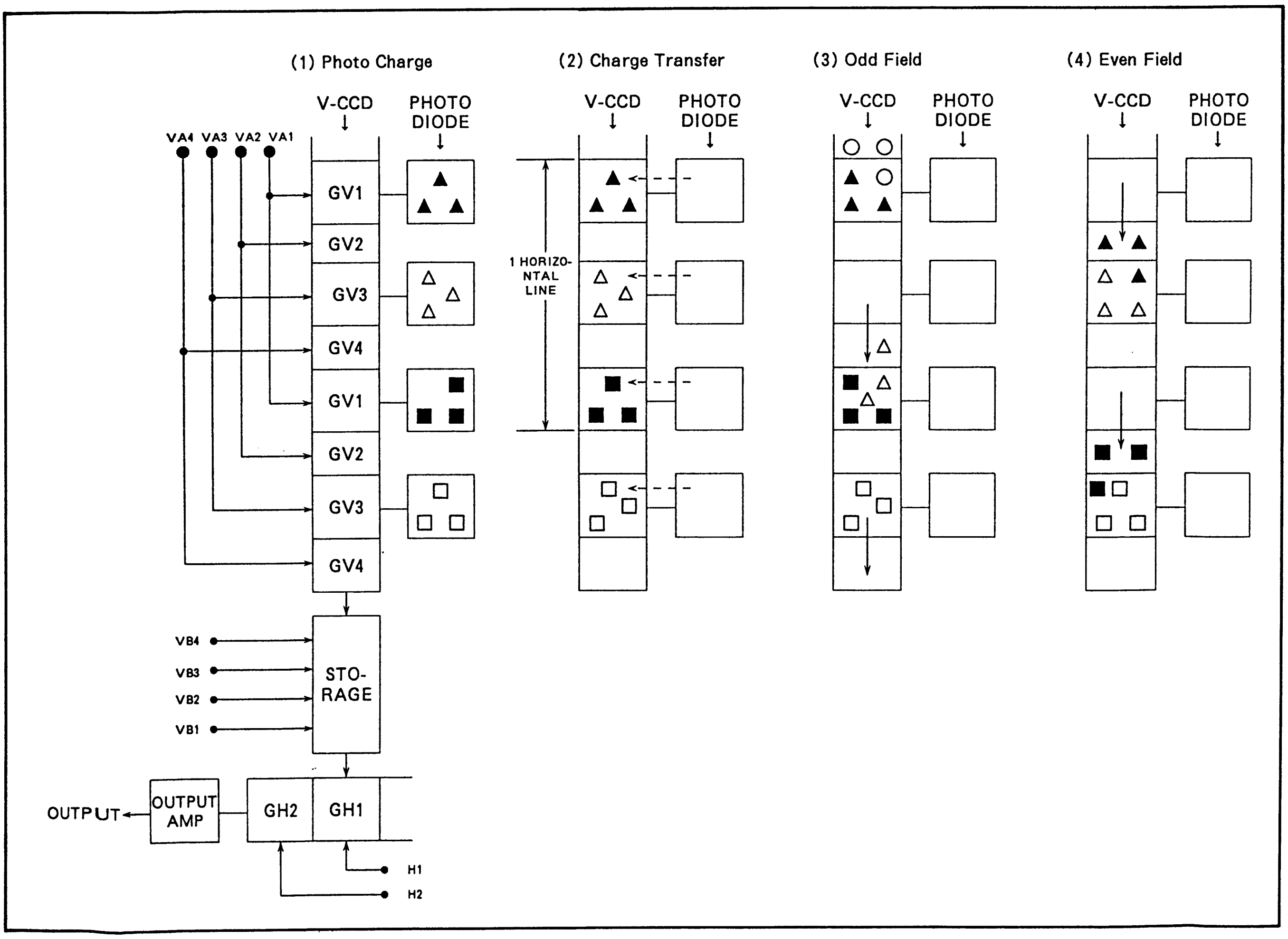

(1) Photo Charge
(2) Charge Transfer
(3) Odd Field
(4) Even Field
V-CCD
PHOTO DIODE
VA4 VA3 VA2 VA1
GV1
GV2
GV3
GV4
1 HORIZONTAL LINE
VB4
VB3
VB2
VB1
STORAGE
OUTPUT
OUTPUT AMP
GH2
GH1
H1
H2

Figure C10 CCD Charge Transfer (Field Mode)

1-3. CCD DRIVE CIRCUIT

1) CCD DRIVE

The CCD requires four types of drive as shown below.

a. A high speed driver to transfer the charge from the CCDs to the storage area.

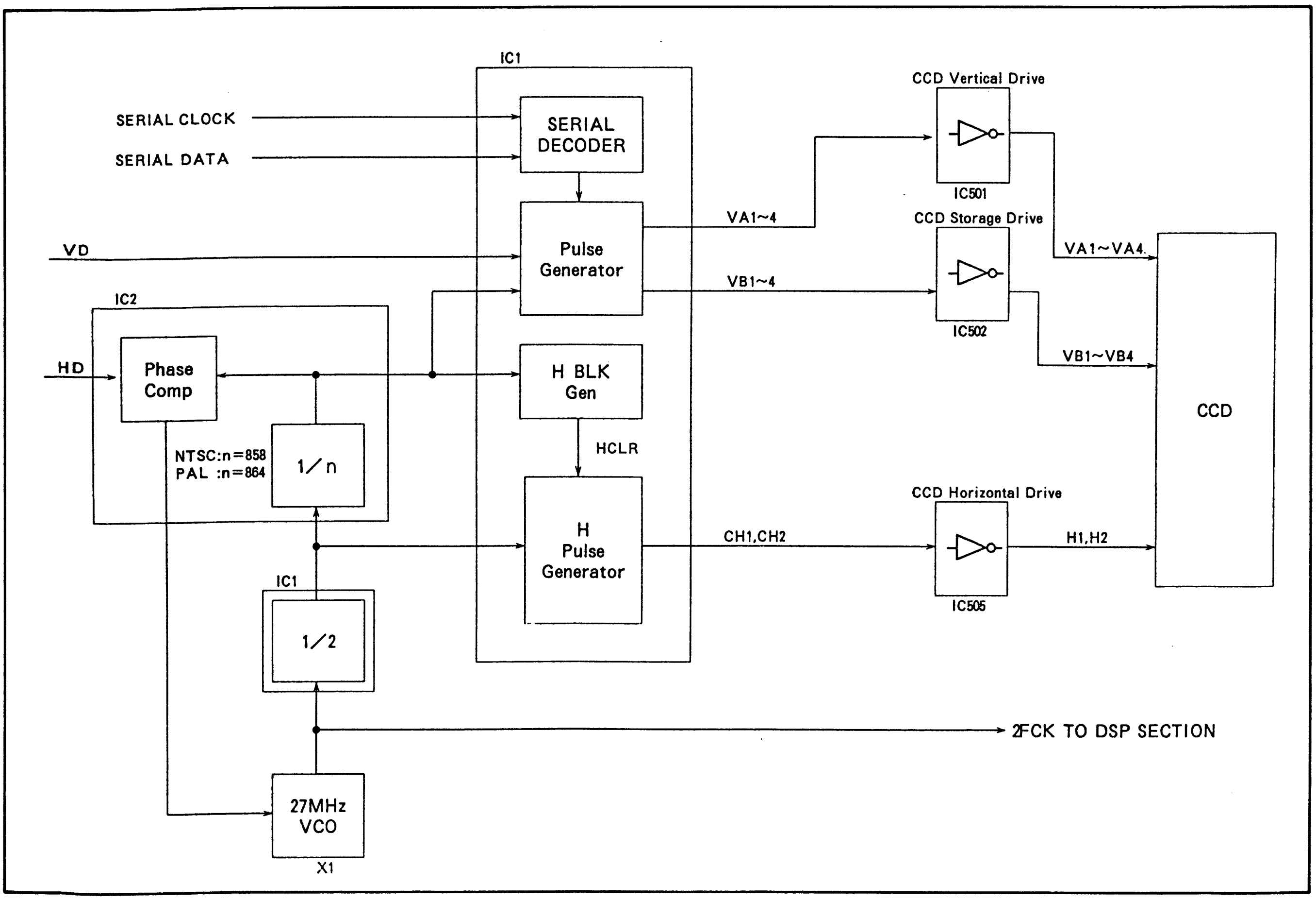
b. A frame rate driver to transfer the change from the CCDs to the vertical shift register.

c. A line rate driver shifts the data down the vertical shift register and finally to the horizontal shift register.

d. A clock to transfer the charge out of the horizontal shift register.

As can be seen Figure C11, the 27 MHz crystal oscillator is phase locked to the horizontal drive at IC2. This clock is then divided by 858 (864:PAL), and goes to IC1 that generate a correctly phased H pulse to the CCD horizontal driver (IC505). The incoming vertical drive passes thru IC1 and goes to CCD vertical driver (IC501) and CCD storage driver (IC502).

The clock used to transfer the data from the horizontal shift register comes from the 1/2 divider in IC1 and runs 13.5 MHz. This same clock drives the digital processing section. The 27 MHz clock signal is fed directly to D/A converter of the DSP section because the spatial offset of CCD. The output signal should be sampled at twice frequency versus the CCD sampling frequency for true reproduction.



IC1
SERIAL CLOCK
SERIAL DATA
SERIAL DECODER
VD
Pulse Generator
VA1~4
VB1~4
IC2
HD
Phase Comp
H BLK Gen
HCLR
NTSC:n=858
PAL :n=864
1/n
H Pulse Generator
CH1,CH2
IC1
1/2
27MHz VCO
X1
2FCK TO DSP SECTION
CCD Vertical Drive
IC501
CCD Storage Drive
IC502
CCD Horizontal Drive
IC505
VA1~VA4
VB1~VB4
H1,H2
CCD

Figure C11 CCD Drive Block Diagram

The vertical shift register, shift pulse timing is quite complex. The timing of these vertical drive pulse is shown in Figure C12.

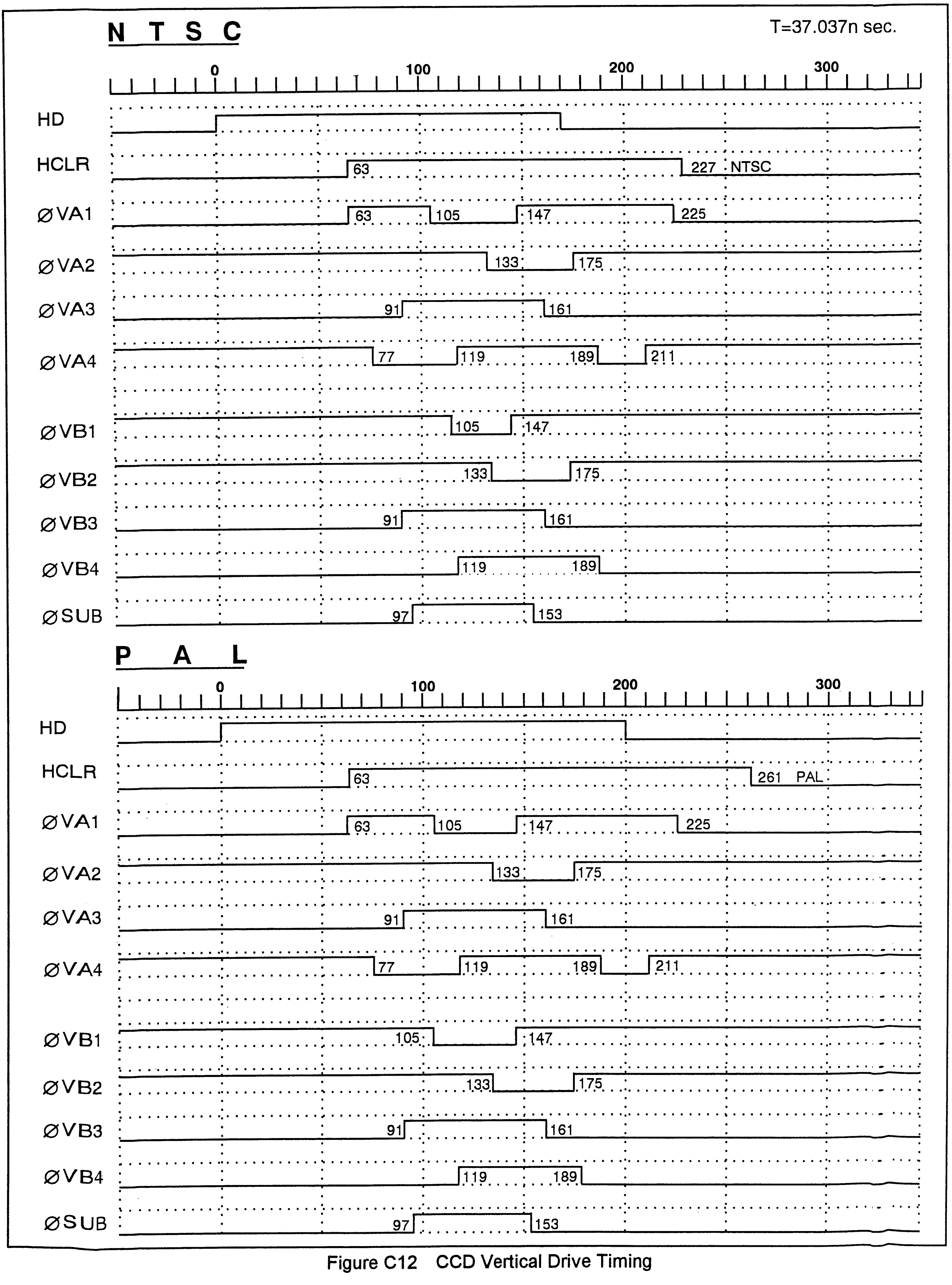

N T S C
T=37.037n sec.
0
100
200
300
HD
HCLR
63
227 NTSC
ØVA1
63
105
147
225
ØVA2
133
175
ØVA3
91
161
ØVA4
77
119
189
211
ØVB1
105
147
ØVB2
133
175
ØVB3
91
161
ØVB4
119
189
ØSUB
97
153
P A L
0
100
200
300
HD
HCLR
63
261 PAL
ØVA1
63
105
147
225
ØVA2
133
175
ØVA3
91
161
ØVA4
77
119
189
211
ØVB1
105
147
ØVB2
133
175
ØVB3
91
161
ØVB4
119
189
ØSUB
97
153

Figure C12 CCD Vertical Drive Timing

2) HIGH SPEED SHUTTER

(GENERAL)

Unlike film cameras that use mechanical shutters, CCD cameras can make changes to the way the vertical shift register is read out, enabling the camera to emulate a high speed "mechanical" shutter.
The reason for the feature is to eliminate "blurry" images of fast moving objects, when observed in still or slow-motion of the VTR's playback.

The normal charging time of CCDs is 60 Hz (50 Hz:PAL) then sent to the V-CCD. To achieve the shutter effect, the charging time is shortened (1/500, 1/1000, 1/2000 etc.) and the charge is output to V-CCD sensor. Unfortunately when operation is used, the light intensity is also decreased, resulting in a darker image.

As shown in Figure C13, during the blanking period (4), the photo diode start charging. At the end of this period, the charges on A1, A2 and A3 on the V-CCD are stored before the high speed transmission pulse aborts the process. All charges in the V-CCD are cleared during this period, shifting (period 5).

After this charge has been shifted, the next charge (B1 to B3) in the PD is sent to the V-CCD during period 6 and normal shifting is performed. This charge (B1 to B3) is used to create the picture in the high speed shutter mode (Figure C13).
At the same time, the PD is charging again, however, this will be aborted during the next blanking period so it is not used to create the picture. If high speed charging is performed for 1/2000 second, the following items should be noted:

1. In the PAL model, since the high shutter speed is 1/2000 second (the normal speed being 1/50 second), this model requires forty times the illumination of the normal mode. In other words, sensitivity becomes 1/20th (the minimum illumination being 200 lux in comparison with 10 lux in normal mode).

2. When using NTSC model in high speed shutter mode, natural light sources should be used since artificial lamp (incandescent , fluorescent, mercury, etc.) will cause a flicker due to the 50Hz power source frequency.

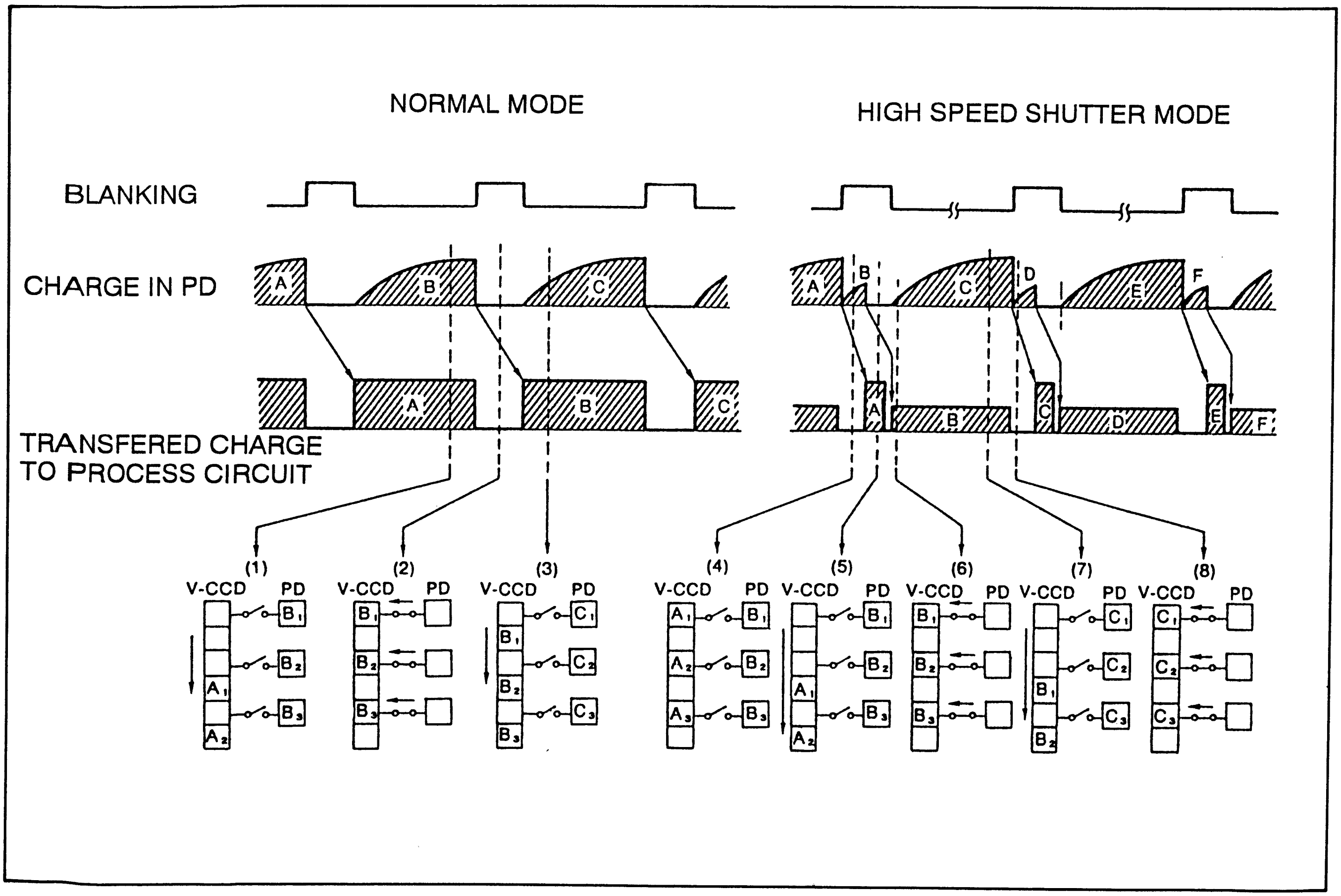


Figure C13 Charging for Normal and High Speed Shutter Mode

The control for the electronic shutter is generated on the CCD drive board. The block diagram is shown in Figure C14.

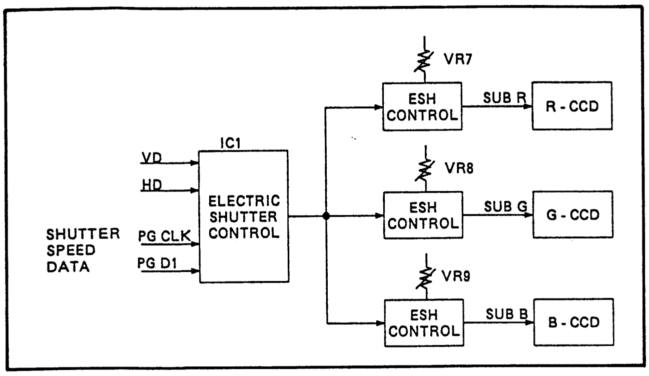

VR7
ESH CONTROL
SUB R
R-CCD
IC1
VD
HD
ELECTRIC SHUTTER CONTROL
SHUTTER SPEED DATA
PG CLK
PG D1
VR8
ESH CONTROL
SUB G
G-CCD
VR9
ESH CONTROL
SUB B
B-CCD

Figure C14 Electronic shutter

For faster shutter speeds, the electronic shutter generates a pulse to discharge to CCD so that the effective image exposure time is reduced. The shutter speed is determined by the interval between the shutter pulse and the pulse which transfers the data from the CCDs.

The smaller the interval, the faster the shutter - the maximum shutter speed being 1/200 second. The pulse timings for each shutter speed are illustrated in the Figure C15.

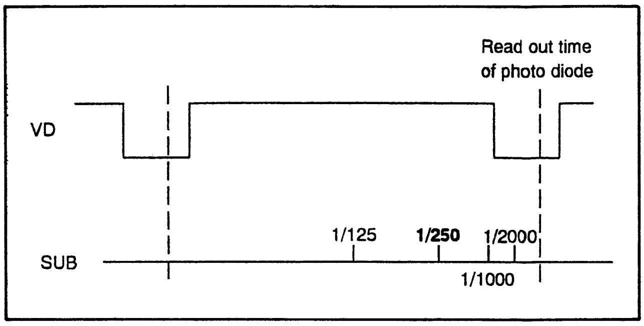

Read out time of photo diode
VD
SUB
1/125
1/250
1/2000
1/1000

Figure C15 CCD Electronic Shutter Control Pulse

3) Vertical Fine

The vertical fine function increases the vertical resolution by changing the CCDs at the frame rate 30 Hz (PAL: 25 Hz), instead of the field rate.
At this time, the CCD charges are not mixed in the transfer process, but because of no longer charging time, lag increases. Figure C16 shows the CCD transfer in vertical fine mode.

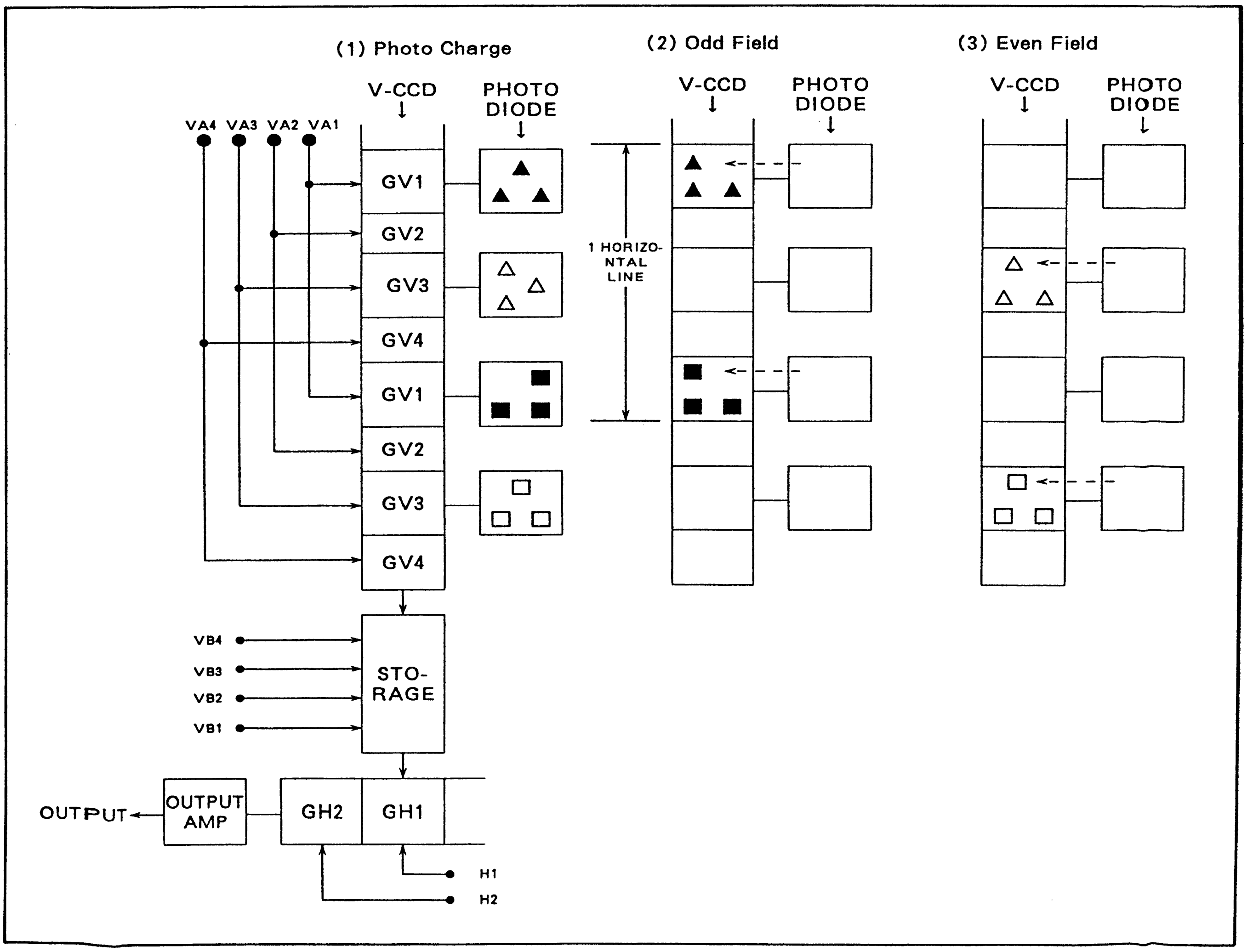

(1) Photo Charge
(2) Odd Field
(3) Even Field
V-CCD
PHOTO DIODE
VA4 VA3 VA2 VA1
GV1
GV2
GV3
GV4
1 HORIZONTAL LINE
VB4
VB3
VB2
VB1
STORAGE
OUTPUT
OUTPUT AMP
GH2
GH1
H1
H2

Figure C16 CCD Charge Transfer (Vertical Fine Mode)

1-4. PRE-AMPLIFIER CIRCUIT

The Pre-amplifier circuits are identical for all three (RGB) colors, so only the Red channel will be explained here.

1) Low Pass Filter

The Red signal is fed to the low pass filter from the R CCD (I101, C109-111, R104) to remove harmonic of the 13.5MHz clock, and to cancel high frequency noise above 40MHz.

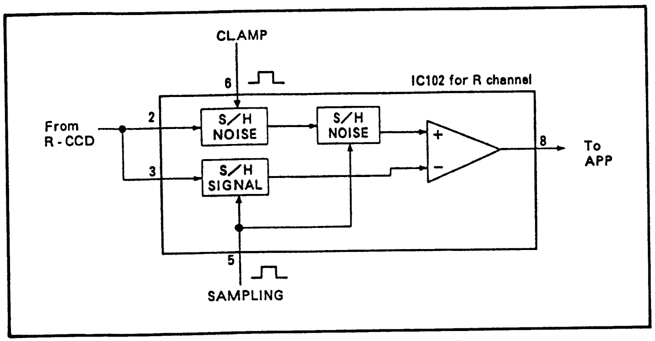

CLAMP
6
IC102 for R channel
From R-CCD
2
3
S/H NOISE
S/H NOISE
S/H SIGNAL
+
−
8
To APP
5
SAMPLING

Figure C17 CDS Circuit

2) Correlated Double Sampling (CDS)

Afterwards, the signal fed to the pre-amplifier IC102 (CDS). The function of this circuit is to extract only the signal components without any noise or DC fluctuation. Combining that signal with sampled signal as shown in Figure C17, a continuous output signal is maintained with relation to CCDs normal output due to the construction of the device.
During the sample period, only the signal portion of CCD is clamped and then supplied to pin 8 of IC102 as a pre-video signal. This signal is then sent to the LPF (FL3401) which removes the CDS's 13.5 MHz switching noise. That output signal becomes the continuous output signal component as shown in Figure C18.

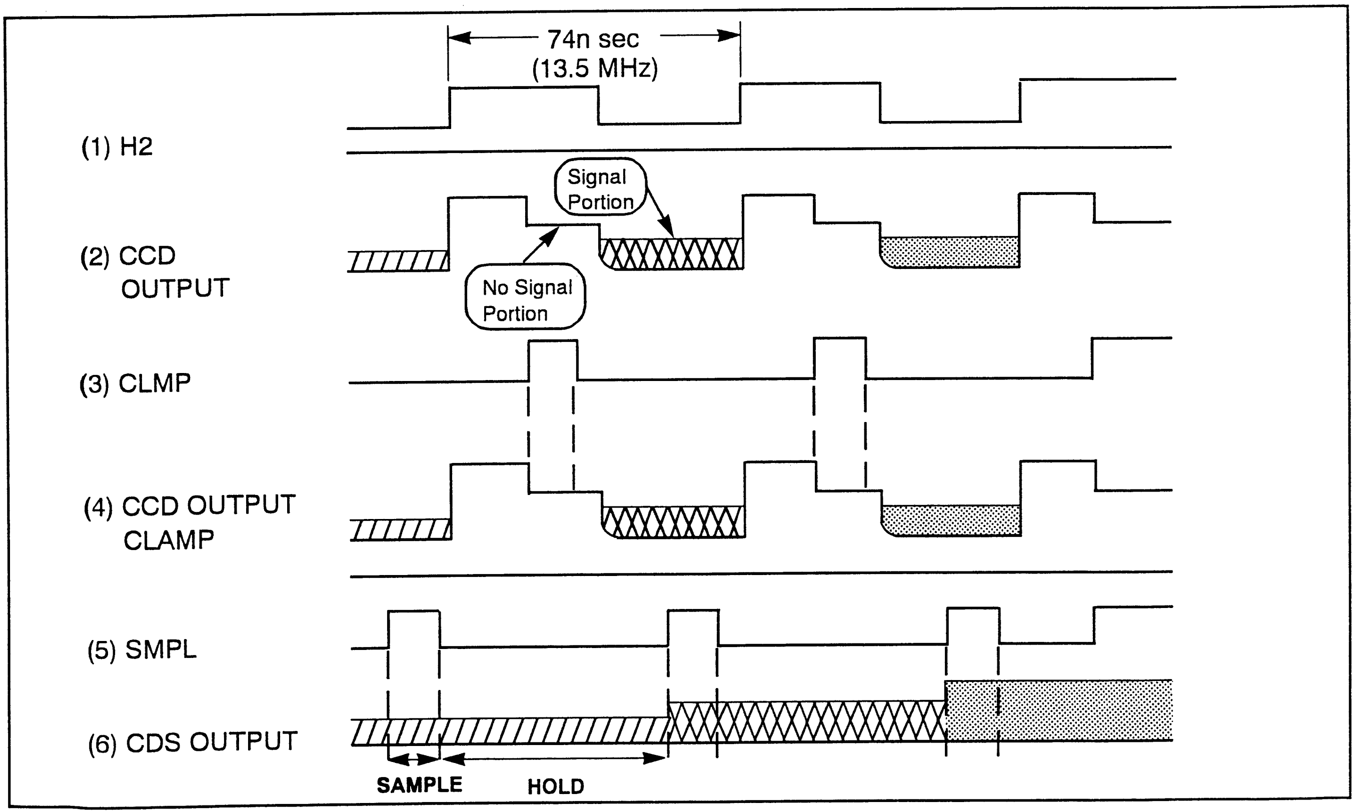

74n sec
(13.5 MHz)
(1) H2
Signal Portion
(2) CCD OUTPUT
No Signal Portion
(3) CLMP
(4) CCD OUTPUT CLAMP
(5) SMPL
(6) CDS OUTPUT
SAMPLE
HOLD

Figure C18 CDS Waveforms

3) Low Pass Filter

The low pass filter (Q3432, C3533 and L3418) removes the 6.75 MHz clock component by means of Low Light (LL) high signal while setting camera gain to super high (+30dB). The CCD is sampled with a 6.75 MHz clock to increase the gain of the CCDs output.

4) Super High Gain (30dB Gain-up)

This function increases the gain up to 30dB. Super high gain mode can be selected from the on-screen menu of the camera. As can be seen in Figure C19, the unit can achieve +30dB gain by first changing the CCD's sampling frequency from 13.5 MHz to 6.75 MHz. This results in a +6dB gain, next by using a +24dB amplifier then effective output is +30dB.

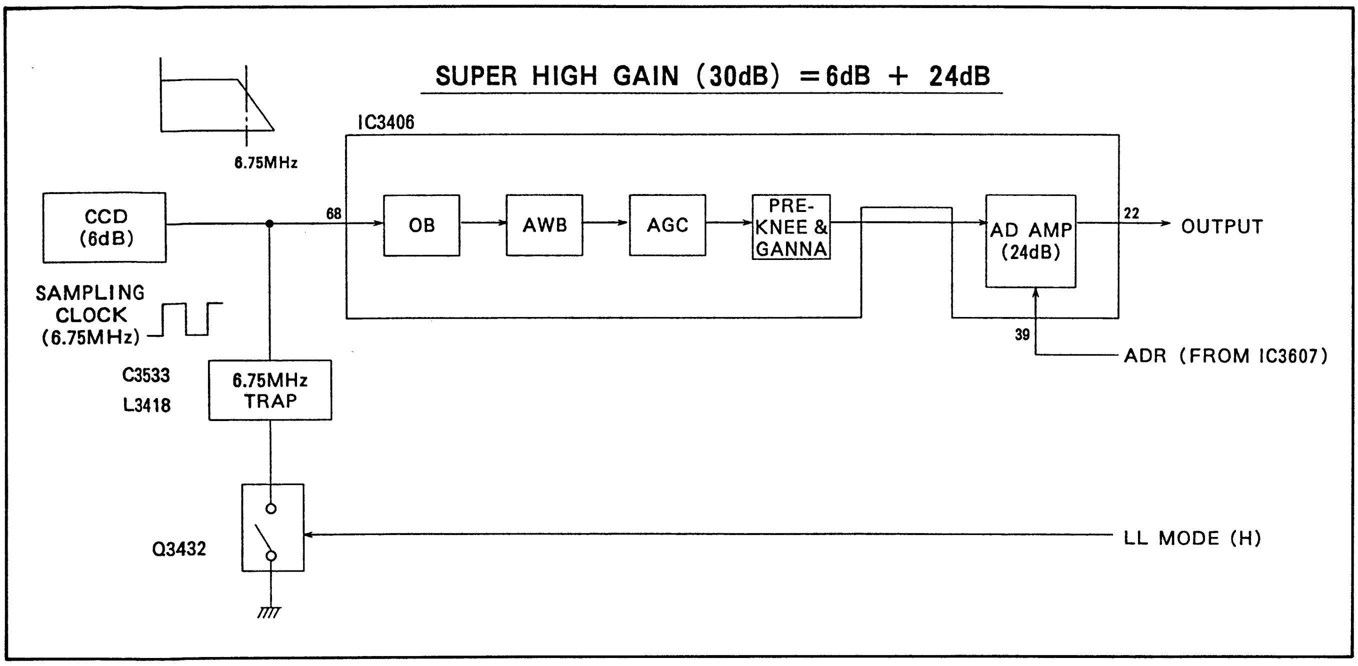

SUPER HIGH GAIN (30dB) =6dB + 24dB
6.75MHz
IC3406
CCD (6dB)
68
OB
AWB
AGC
PRE-KNEE & GANNA
AD AMP (24dB)
22
OUTPUT
SAMPLING CLOCK (6.75MHz)
39
ADR (FROM IC3607)
C3533
L3418
6.75MHz TRAP
Q3432
LL MODE (H)

Figure C19 Super High Gain

1-5. ANALOG PRE-PROCESS (APP) CIRCUIT

The analog pre-process circuit are identical for all three (RGB) colors, so only the Red channel will be explained here.

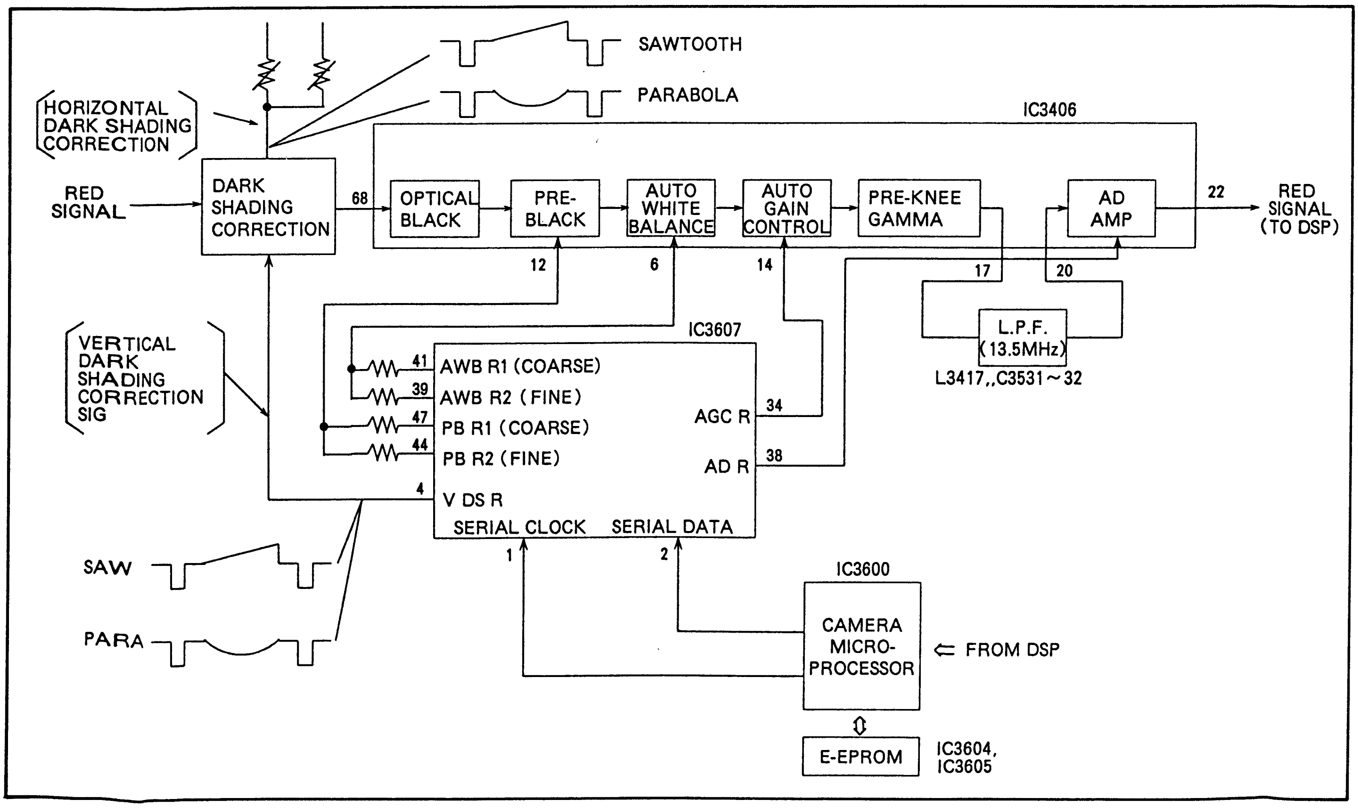

SAWTOOTH
PARABOLA
IC3406
HORIZONTAL DARK SHADING CORRECTION
RED SIGNAL
DARK SHADING CORRECTION
68
OPTICAL BLACK
PRE-BLACK
AUTO WHITE BALANCE
AUTO GAIN CONTROL
PRE-KNEE GAMMA
AD AMP
22
RED SIGNAL (TO DSP)
12
6
14
17
20
L.P.F. (13.5MHz)
L3417,,C3531~32
IC3607
VERTICAL DARK SHADING CORRECTION SIG
41
AWB R1 (COARSE)
39
AWB R2 (FINE)
47
PB R1 (COARSE)
44
PB R2 (FINE)
AGC R
34
AD R
38
4
V DS R
SERIAL CLOCK
SERIAL DATA
1
2
SAW
PARA
IC3600
CAMERA MICRO-PROCESSOR
⇐ FROM DSP
E-EPROM
IC3604, IC3605

Figure C20 Overall Block Diagram of APP Circuit

1) Dark Shading Correction

Dark shading correction is used to adjust variations of different blocks within the CCD. Correction is applied to both horizontal and vertical blocks. The horizontal compensation is done by VR3402-3404 and VR3408-3410 on the Pre-Process board.
The vertical compensation is automatically done between IC3600 (camera MPU) and IC3704 (DSP chip) as shown in Figure C23. The dark shading waveforms are shown in Figure C21.

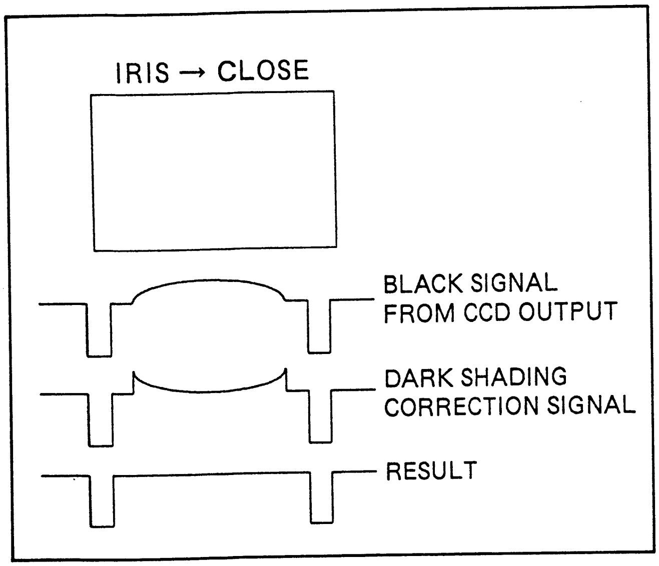

IRIS → CLOSE
BLACK SIGNAL FROM CCD OUTPUT
DARK SHADING CORRECTION SIGNAL
RESULT

Figure C21 Dark Shading Correction

When the ABB switch pressed, dark shading correction is carried out along with an auto black balance. The vertical dark shading value is stored in IC3704 (DSP chip) after the auto black balance done. The value is then read out to IC3600 (camera MPU). The microprocessor then serially transfers the data to the IC3607 (D/A converter).

The output of D/A converter is then applied the APP circuit as the control voltage for the gain control multiplier. If the ABB switch isn't pushed, IC3607 will be loaded with a preset value from IC3604, IC3605 (E-PROM) via camera microprocessor, as shown in Figure C22.

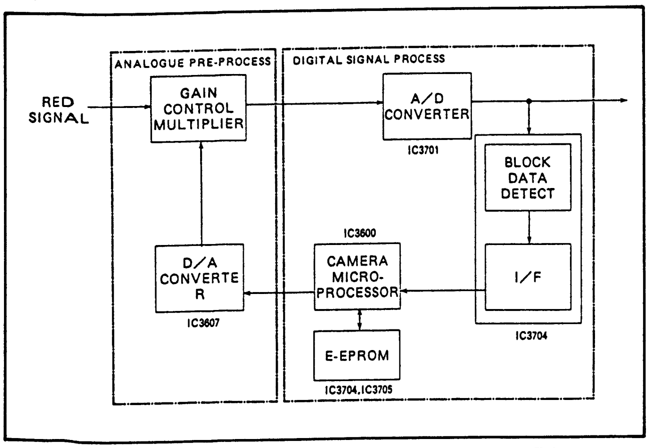

ANALOGUE PRE-PROCESS
DIGITAL SIGNAL PROCESS
RED SIGNAL
GAIN CONTROL MULTIPLIER
A/D CONVERTER
IC3701
BLOCK DATA DETECT
IC3600
D/A CONVERTE R
CAMERA MICRO-PROCESSOR
I/F
IC3607
IC3704
E-EPROM
IC3704,IC3705

Figure C22 Dark Shading Correction Block Diagram

The shading value stored in IC3704 (DSP chip) is generated when the dark shading is activated. To generate a value, the shading correction circuit measures the output of each A/D converter of the digital signal process circuit using the block data detection.
The measured value is compared to a reference on camera microprocessor. The result is used to generate shading correction to the D/A converter. The D/A's generates the analog correction signal to the APP gain control multiplier until the next dark shading correction is activated.

The block data detect circuit uses 8 horizontal and 6 vertical samples in the NTSC system (PAL system: 8 horizontal and 7 vertical samples). The block data detect circuit calculates an average value for each horizontal block (successive approximation) and these values are stored in IC3704 (DSP chip).
When the camera microprocessor reads these values from DSP, the value compared to a reference and the microprocessor generates an average for an area of the CCD as shown in Figure C23.

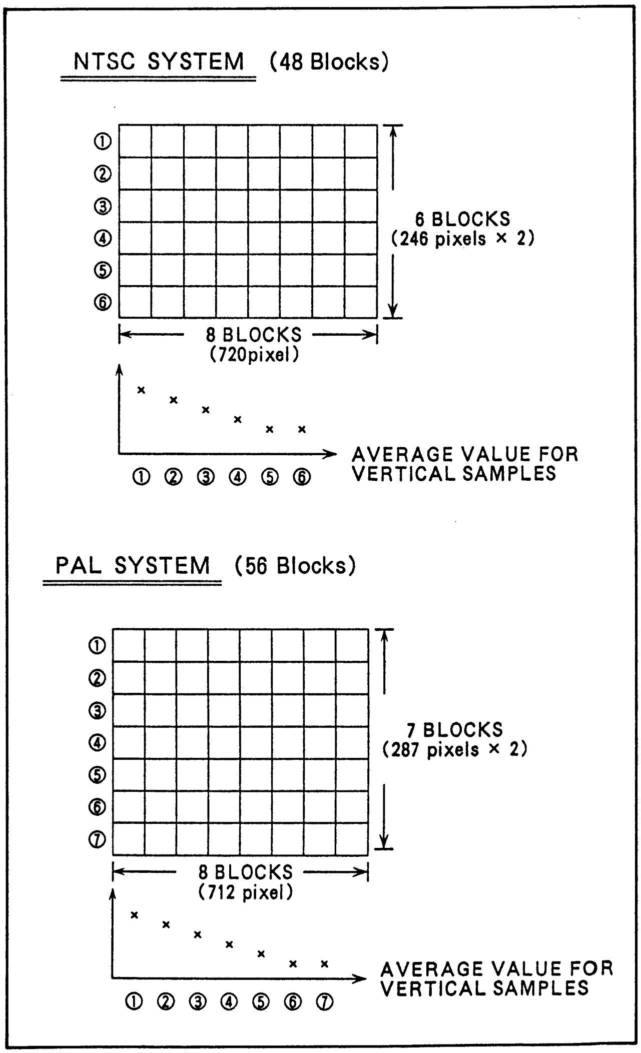

NTSC SYSTEM (48 Blocks)
① ② ③ ④ ⑤ ⑥
6 BLOCKS (246 pixels × 2)
8 BLOCKS (720pixel)
AVERAGE VALUE FOR VERTICAL SAMPLES
① ② ③ ④ ⑤ ⑥
PAL SYSTEM (56 Blocks)
① ② ③ ④ ⑤ ⑥ ⑦
7 BLOCKS (287 pixels × 2)
8 BLOCKS (712 pixel)
AVERAGE VALUE FOR VERTICAL SAMPLES
① ② ③ ④ ⑤ ⑥ ⑦

Figure C23 Block Dividing Chart of Dark Shading Correction

2) Optical Black Clamp

The CCD emits an output corresponding to the incoming light intensity, but when no light is present, an output current (dark current) is present. Since the dark current can fluctuate with varying operating temperatures, there is a possibility that the white balance will also vary with temperature changes.
To prevent this, the CCD is equipped with an optical black (OB) zone on the CCD surface. This zone cuts off the incoming light at the end of the horizontal scan. IC401 produces an clamp pulse for the optical black (CPOB), in order to regulate the sampling area. The CPOB samples the OB zone's signal level and clamps it to a known level.
Whenever the dark current drifts with temperature changes, the DC potential of the OB remain constant as shown in Figure C24.

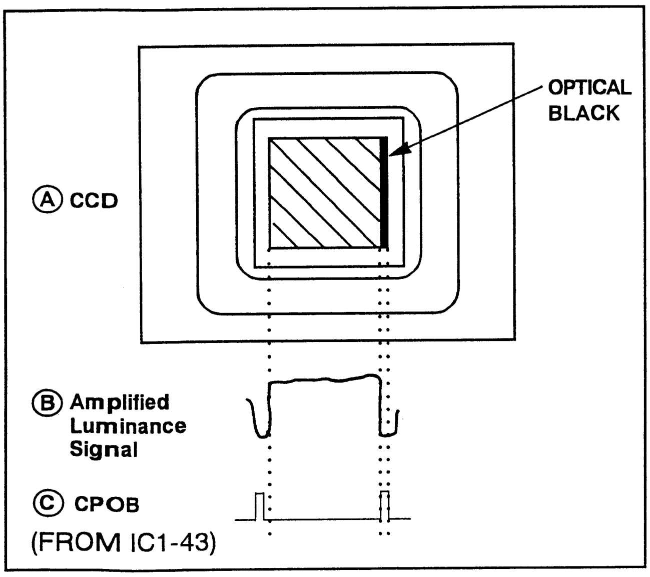

OPTICAL BLACK
Ⓐ CCD
Ⓑ Amplified Luminance Signal
Ⓒ CPOB
(FROM IC1-43)

Figure C24 Optical Black Clamp

3) Auto Black Balance (ABB)

This circuit corrects the camera's RGB signal to correct black level when the iris is closed. When the ABB is activated, the DSP reads digitized RGB signal and the block data detect calculates the average values.
The camera microprocessor reads the average values from the block data detect circuit and calculates the average between R, G and B signals. The calculated block are then compared the reference level which is stored in the E-PROM. The error (level difference) is fed back to the D/A converter, and ABB corrects the black level by changing the gain of RGB signal as shown in Figure C25.

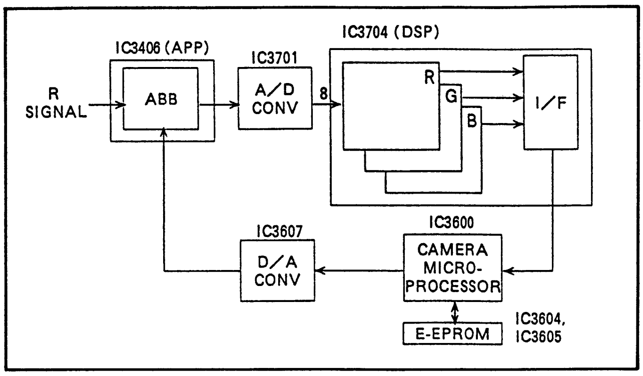

IC3704 (DSP)
IC3406 (APP)
IC3701
R SIGNAL
ABB
A/D CONV
8
R
G
B
I/F
IC3607
D/A CONV
IC3600
CAMERA MICRO-PROCESSOR
E-EPROM
IC3604, IC3605

Figure C25 Auto Black Balance Block Diagram

4) Auto White Balance (AWB)

This circuit compensates the white balance (purity) of the camera's RGB signals in difference color temperature. When a white image is shot, the AWB automatically adjusts the balance of the camera's signals to correctly reproduce white.

There are two type of AWB to choose from preset mode or user selected mode. The preset mode automatically corrects the white balance in 3200K condition. In the user selected mode, the AWB corrects the white balance in any color temperature (indoor or outdoor light) by using the block data detect circuit and dark shading correction. The circuit operation is explained below.

When the camera is focused on the white object and the AWB is pressed, the DSP reads the digitized RGB signal and the block data detect calculates the an average values. The camera microprocessor reads the average values and then selects the maximum level. The microprocessor then compares the maximum R and B values to the maximum G level and recalculates R and B values.
The error values are then sent to the D/A converter so that RGB gain is changed so the levels are balanced to reproduce white as shown in Figure C26.

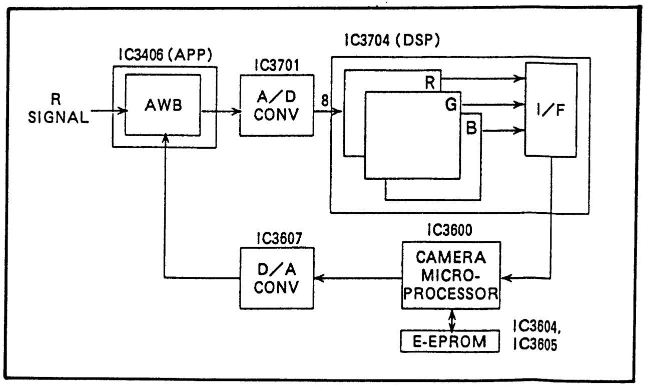

IC3704 (DSP)
IC3406 (APP)
IC3701
R SIGNAL
AWB
A/D CONV
8
R
G
B
I/F
IC3607
D/A CONV
IC3600
CAMERA MICRO-PROCESSOR
E-EPROM
IC3604, IC3605

Figure C26 Auto White Balance Block Diagram

5) Pre-Knee and Gamma Correction

The high level detail portion of the luminance signal is lost when the input signal is higher than specification and white clipped. The pre-knee circuit prevents this loss by compressing the high level portion to 128% as shown in Figure C27.

This circuit works in conjunction with the gamma circuit. The pre-knee angle varies with the input level, The AG-DP800's input dynamic range is 400% while the gamma level is set to 0.45.

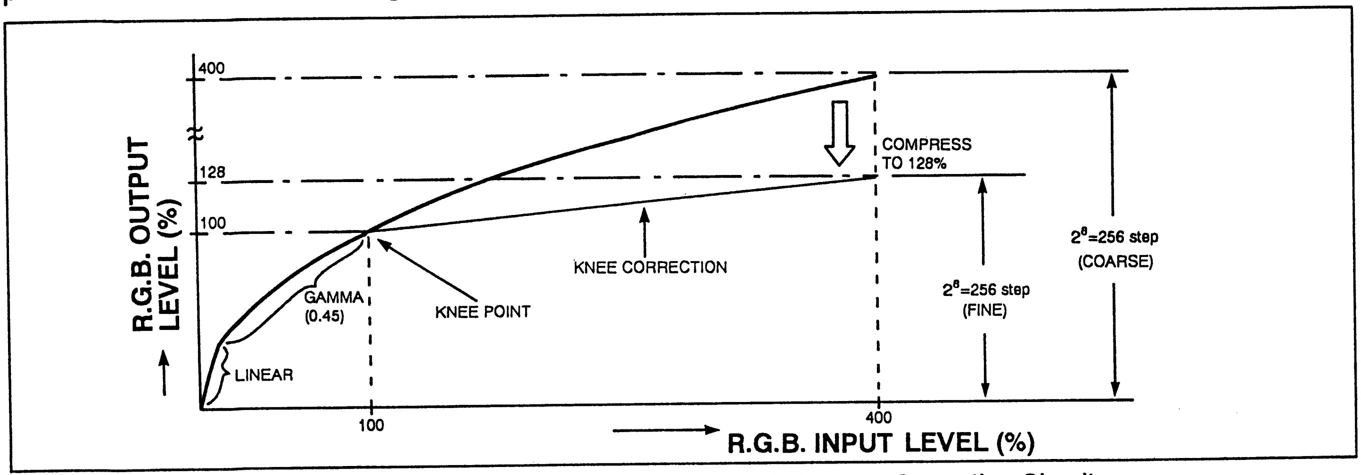


Figure C27 Characteristics of Pre-Knee & Gamma Correction Circuit

6) Automatic Iris Control (ALC)

When the camera turned on, the AGC is set to 0dB prior to auto iris control. As the iris slowly opens, the CCD produce an image in proportion to the incoming light intensity. The output is fed to the DSP circuit via pre-amplifier and analogue pre-process circuit. The DSP reads the digital G signal level, and the block data detect of DSP calculates an average value. (see dark shading correction for block data detect explanation).
The camera's microprocessor reads the average value and selects the one with the maximum value. Next the microprocessor compares that selected block to a preset value that is stored in the E-PROM. If the selected block value is smaller in comparison to the preset value, the iris opened.
But if the selected block value is larger than the preset, the iris closes step by until both values are equal. When the camera is used in low level conditions, the iris is fully opened, in an attempt to keep the signal level constant. The AGC is then used adjust its gain to maintain levels.

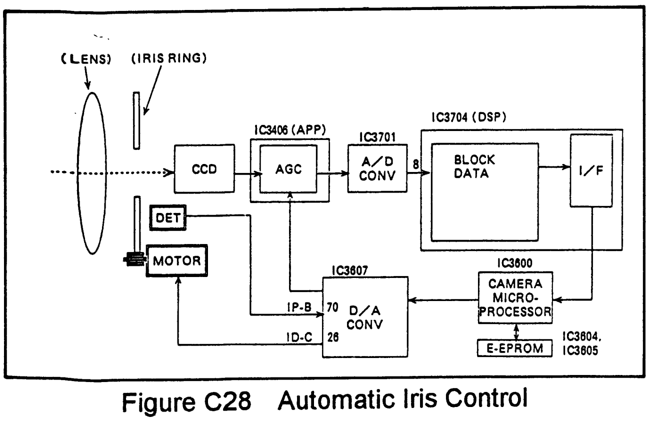


Figure C28 Automatic Iris Control

1-6. DIGITAL SIGNAL PROCESS (DSP) CIRCUIT

A digital signal processing chip (MN6734) is used, and all the signal processing is done digitally. The RGB signals coming from the analog pre-process circuit are A/D converted to an 8-bit digital data, and the converted signals are then digitally processed by the digital signal process circuit (DSP). The overall block diagram of DSP is shown in Figure C29.

The DSP circuit consists of twelve sections as follows.

1. Y Matrix
2. Auto Knee Correction
3. Noise Cancel
4. Y Output
5. V-DTL (Vertical Aperture Correction)
6. H-DTL (Horizontal Aperture Correction)
7. Coring Limiter
8. Chroma Phase Compensator
9. Chroma Low Pass Filter
10. Chroma DTL (Chroma Aperture Correction)
11. Masking
12. Color Bar Generator

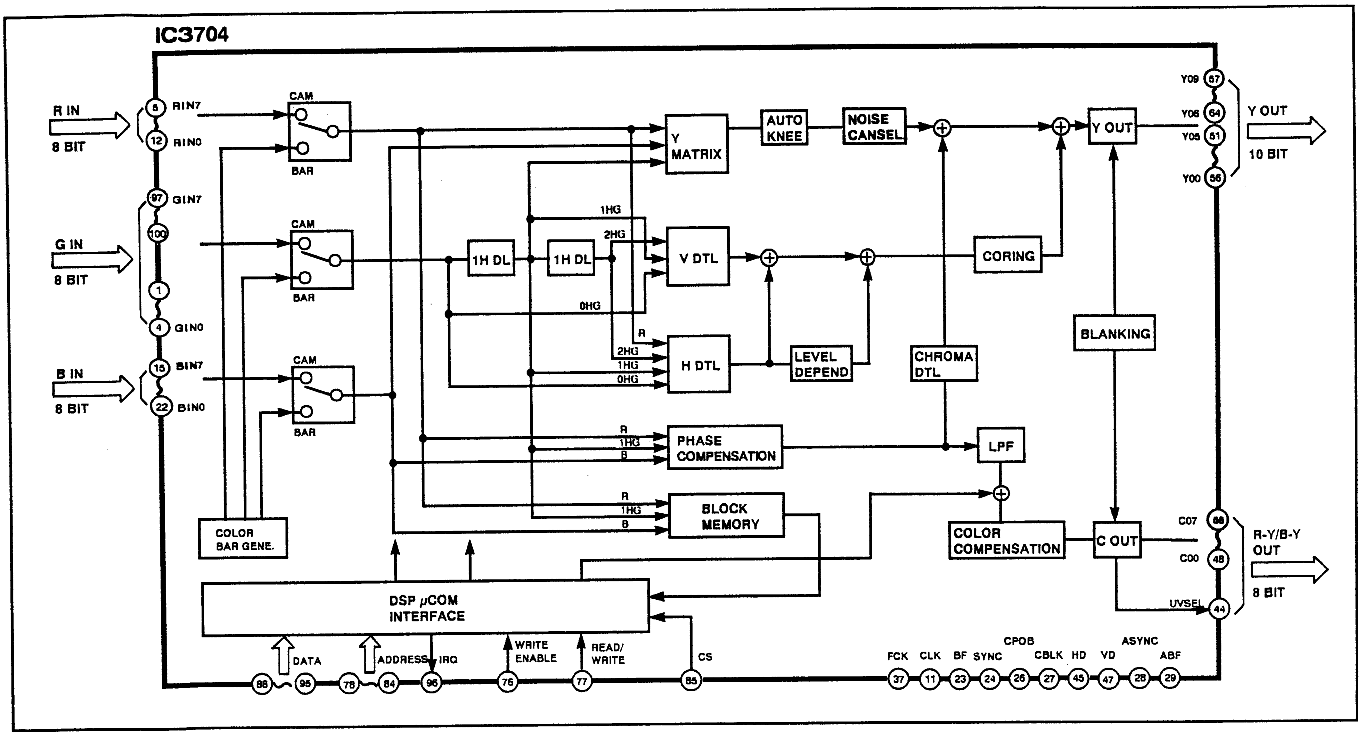

IC3704
R IN
8 BIT
G IN
8 BIT
B IN
8 BIT
RIN7
RINO
GIN7
GINO
BIN7
BINO
CAM
BAR
COLOR BAR GENE.
1H DL
1H DL
1HG
2HG
0HG
R
B
Y MATRIX
V DTL
H DTL
PHASE COMPENSATION
BLOCK MEMORY
AUTO KNEE
NOISE CANSEL
LEVEL DEPEND
CHROMA DTL
CORING
Y OUT
BLANKING
LPF
COLOR COMPENSATION
C OUT
DSP µCOM INTERFACE
DATA
ADDRESS
IRQ
WRITE ENABLE
READ/ WRITE
CS
FCK CLK BF SYNC
CPOB
CBLK HD VD
ASYNC
ABF
Y09
Y06
Y05
Y00
Y OUT
10 BIT
C07
C00
UVSEL
R-Y/B-Y OUT
8 BIT

Figure C29 Overall Block Diagram of DSP IC

1) Y Matrix

The G signal is half pitch delayed to compensate for the spatial offset of the CCD. The half pitch offset is one cycle of 13.5MHz. The G signal is always 1H delayed because of further V-DTL correction as shown in Figure C30, also Figure C30 shows how RGB signals are mixed to make the Y signal.

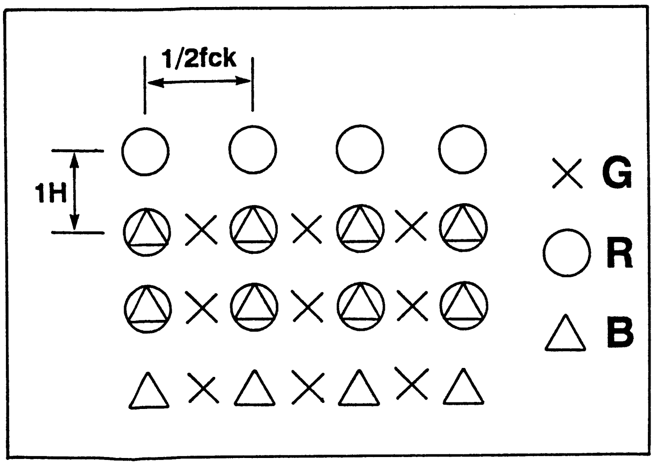

1/2fck
1H
× G
○ R
△ B

Figure C30 Pixel Layout

2) Auto Knee Correction

The Figure C31 shows the characteristic curve of the auto knee circuit. As previously explained the knee circuit compresses the high level signal portion to maintain picture detail in high level (over specification) input signals. Gamma correction is also applied in this processing stage.

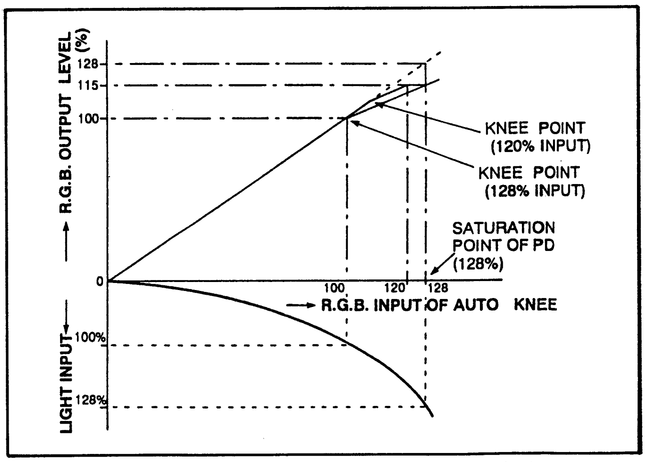


Figure C31 Input / Output Characteristics of Auto Knee Correction

3) Noise Cancel

This circuit eliminates high frequency amplifier noise. Figure C32 shows the circuit to have low and high pass filter and Limiter. The Y input signal follows two path, one path goes to the low pass filter and allows only the Y signal pass.

In the other path, the Y input signal goes to high pass filter, extracting the high frequency noise component. This circuit improves the signal to noise ratio of the Y signal.

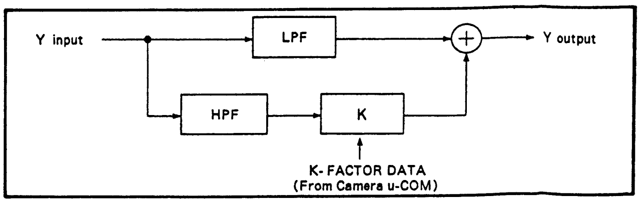

Y input
LPF
Y output
HPF
K
K-FACTOR DATA (From Camera u-COM)

Figure C32 Noise Cancel

4) Y Output

In this circuit, the following adjustments are made.

a. Output gain adjustment
b. Set-up level adjustment
c. Upper and lower clipping
d. Blanking signal mixing

5) V-DTL (Vertical Aperture Correction)

This circuit enhances the image contours give the picture clearer details. This circuit consists of two delay lines and adding circuits. The detail signal is extracted from the G signal. The non delay G signal called 0H is directly fed to the adding circuit. A 1H and 2H delayed G signal is produced from the two 1H delay lines.

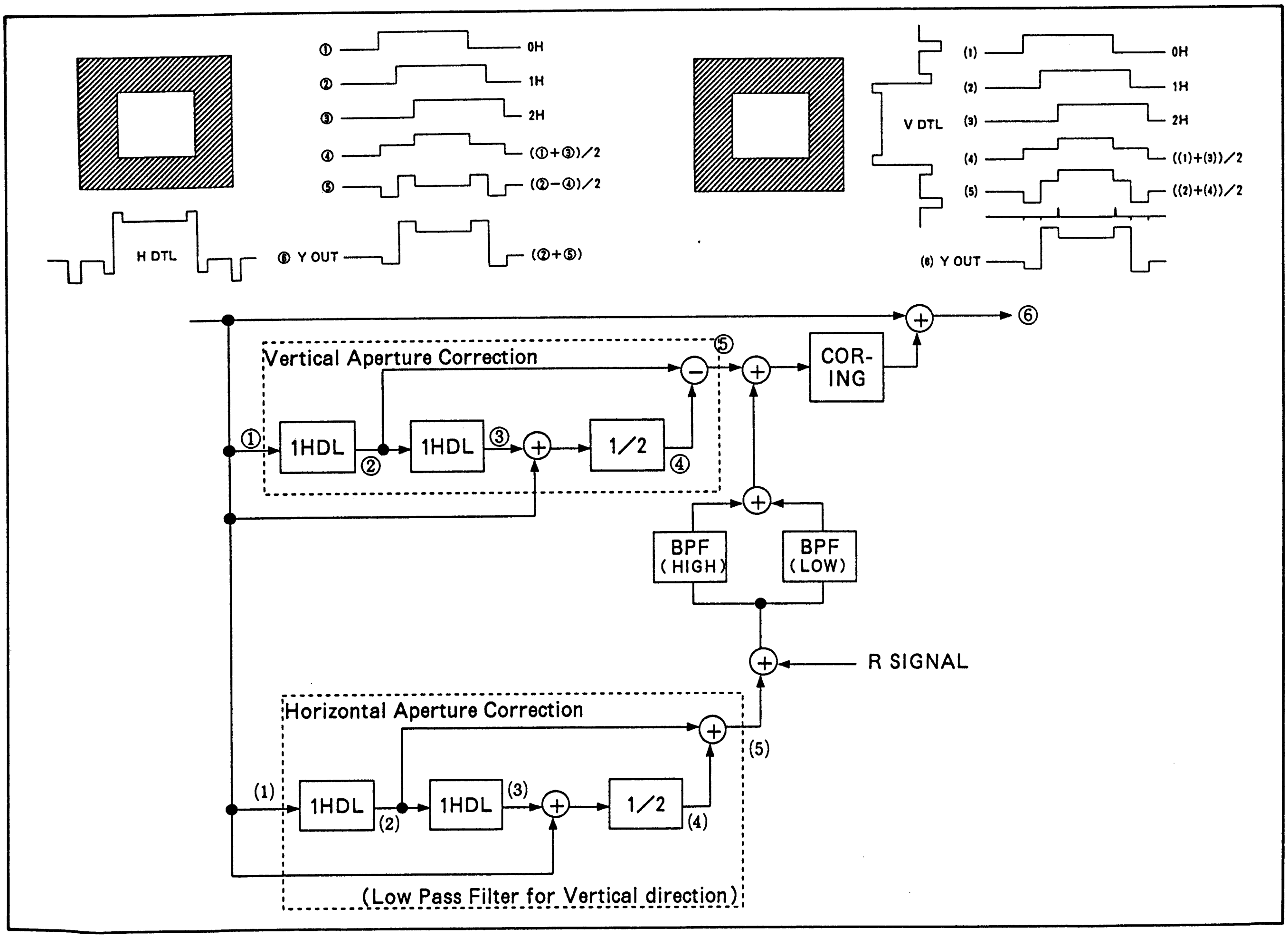
The vertical detail signal is made from the combination of the 0H, 1H and 2H delayed G signals. As shown in Figure D5, the 2H delayed signal is added to the 0H delayed signal (0H+2H/2) and 1H minus the latter signal (0H+2H/2) is combined to Y signal to produce the V-DTL signal. The V-DTL level can be set in the user's scene file menu. See Figure C33.

6) H-DTL (Horizontal Aperture Correction)

This circuit is identical to the V-DTL circuit, with only slight differences, only those difference will be explained here. Figure D6 shows the H-DTL circuit generates the horizontal G detail signal in the same manner as V-DTL circuit. But then the R signal is added to the G signal and the added signals are passed thru both high and low frequency band pass filter to cancel chroma crosswalk.

Afterwards both the H and V DTL signals are added then, mixed with the Y signal making the horizontal detail clearer. The levels for this circuit are accessible from the user's scene file. Then it is added to the R signal and obtains the H detail signal from both the G and R signals. This is because of avoiding the cross color effects.

After that, the H detail signal is added to the V detail signal. Finally the H/V detail signal are mixed with the 1H delayed G signal and makes the H/V detail clearer. The H detail level and its frequency can be preset using the user scene file menu. See Figure C33.



① 0H
② 1H
③ 2H
④ (①+③)/2
⑤ (②−④)/2
H DTL
⑥ Y OUT (②+⑤)
(1) 0H
(2) 1H
(3) 2H
(4) ((1)+(3))/2
(5) ((2)+(4))/2
V DTL
(6) Y OUT
⑥
Vertical Aperture Correction
⑤
COR-ING
①
1HDL
②
1HDL
③
1/2
④
BPF (HIGH)
BPF (LOW)
R SIGNAL
Horizontal Aperture Correction
(5)
(1)
1HDL
(2)
1HDL
(3)
1/2
(4)
(Low Pass Filter for Vertical direction)

Figure C33 Vertical / Vertical Aperture Correction Block

7) Coring Limiter

The H and V detail signals go from the detail circuit to coring circuit, this is where the signal noise component is removed.
Figure C34 shows the coring waveforms for the signal input and output level. The level for this circuit are available from user scene file.

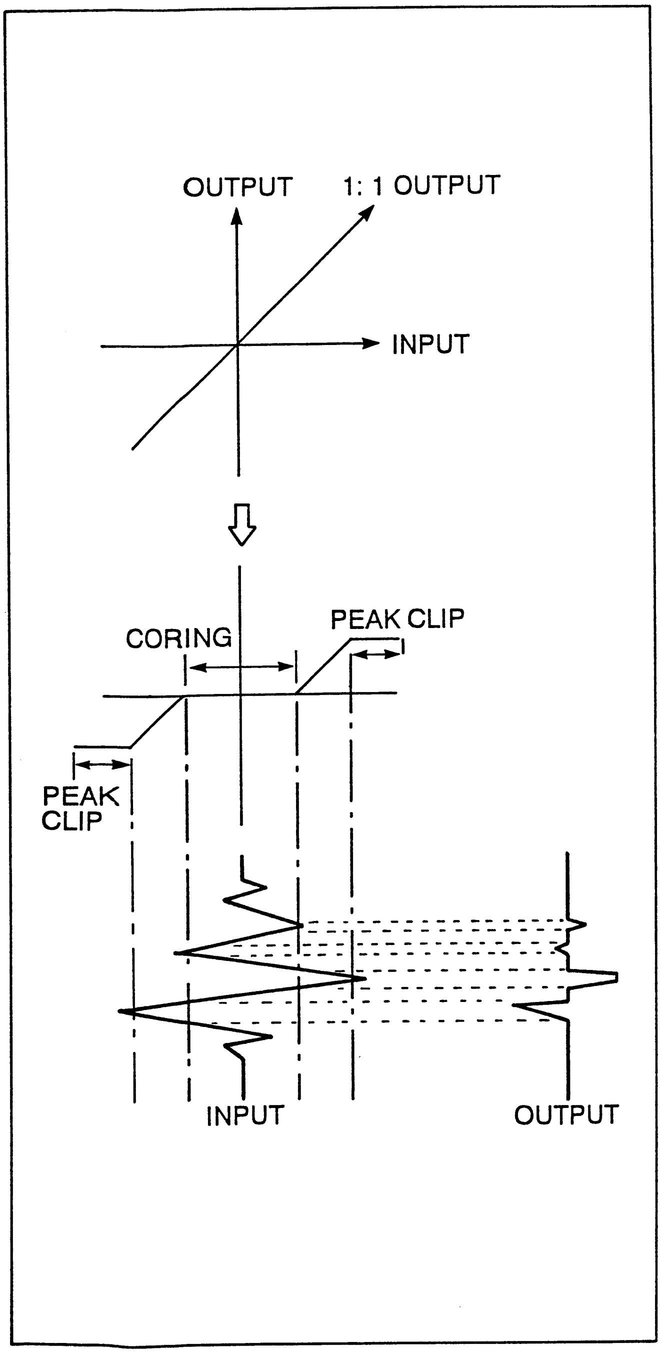


Figure C34 Characteristics of Coring Limiter Circuit

8) Chroma Phase Compensator

The purpose of this circuit is to match the timing phase of RGB signals when the color difference signals (R-Y and B-Y) are produced. The Compensator adjusts the R and B phase according to the G signal.

9) Chroma Low Pass Filter

During chroma encoding, this circuit prevents Nyquist reflection by reducing the 3.58Mhz components.

10) Chroma DTL (Aperture)

When shooting a scene and the image contains mostly red or blue information, this circuit boosts the available luminance signal so high resolution image detail in maintained.

11) Masking

The masking circuit is a matrix enabling the camera to be set up and to compensate for the colorimeter of the scene caused by lighting conditions and different types of camera. The R-Y and B-Y signals under goes the chroma phase Compensator, are sent to the masking circuit. There are four coefficient data, a, b, c, d that generated on the camera microprocessor and are multiplied to the R-G and B-Y signals in the following formulas.

R-Y = a (R-G) + b (B-G)
B-Y = c (R-G) + d (B-G)

These coefficient data can be level set on the matrix to match the camera output in a Multi-camera studio.

12) Color Bar Generator

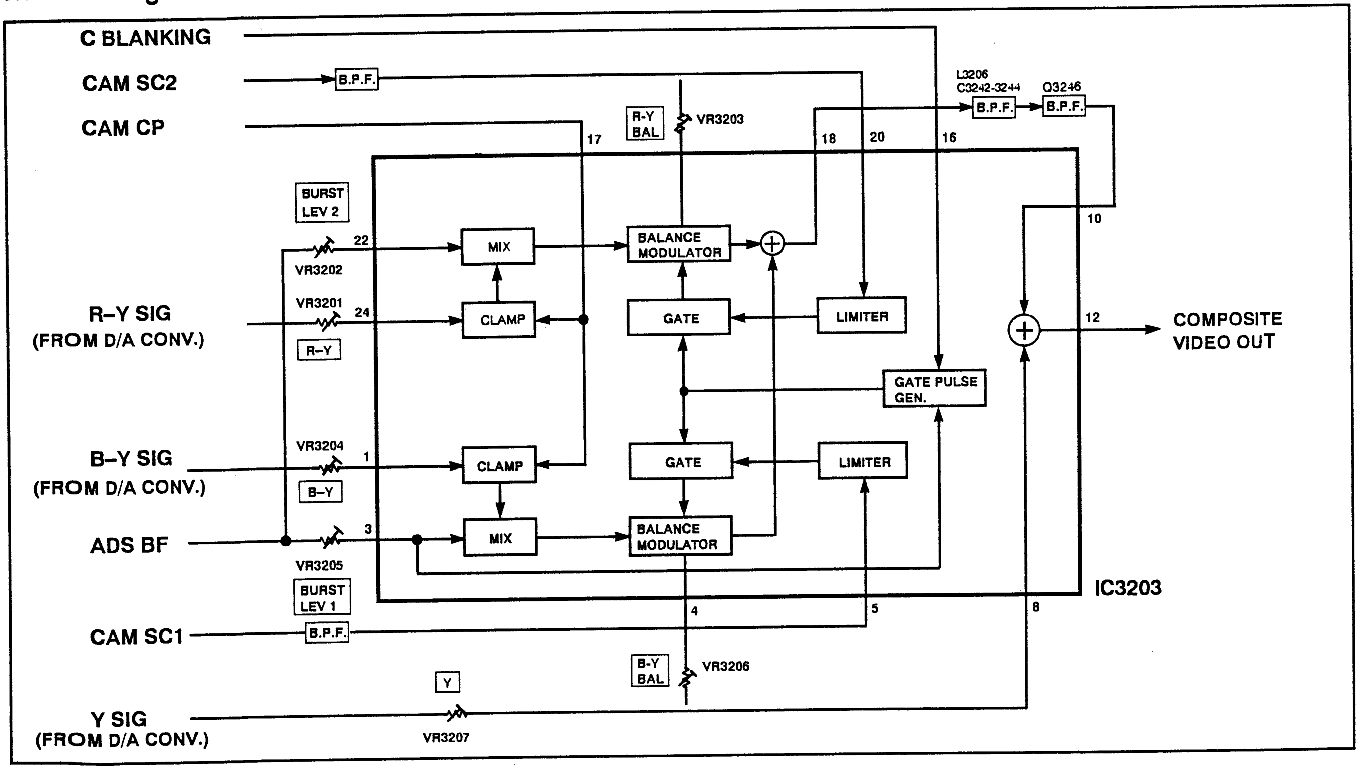
IC3704 is equipped with a color bar generator and it generates the color bar for industrial use. The output of color bar signal can be selected using the output selector switch.

1-7. Encoder Circuit

The encoder circuit is located on the DSP board. After the D/A converters (IC3705, IC3706), the Y, R-Y and B-Y signals are sent to the encoder so a composite signal can be produce at the video output and 26 pin connectors.

The encoder circuit consists of IC3203. The R-Y and B-Y signals are supplied to the balance modulators. The R-Y signal is modulated with a 90 degrees phase shift while the B-Y signal is modulated with a 180 degrees phase shift then both signals are mixed. The combination of the burst flag and the sub-carrier produces the burst signal, and mixed with the mixed chroma signal.

Finally, the combination of the Y signal and chroma signal is produces the composite video signal as shown in Figure C35.



C BLANKING
CAM SC2
CAM CP
B.P.F.
L3206
C3242-3244
Q3246
B.P.F.
B.P.F.
R-Y BAL
VR3203
17
18
20
16
10
BURST LEV 2
22
VR3202
MIX
BALANCE MODULATOR
R-Y SIG
(FROM D/A CONV.)
VR3201
24
R-Y
CLAMP
GATE
LIMITER
12
COMPOSITE VIDEO OUT
GATE PULSE GEN.
B-Y SIG
(FROM D/A CONV.)
VR3204
1
B-Y
CLAMP
GATE
LIMITER
ADS BF
3
MIX
BALANCE MODULATOR
VR3205
BURST LEV 1
IC3203
CAM SC1
B.P.F.
4
5
8
B-Y BAL
VR3206
Y
Y SIG
(FROM D/A CONV.)
VR3207

Figure C35 Encoder Block Diagram

1-8. SYNC GENERATOR CIRCUIT

The sync generator provides V and H drive signal and burst which is synchronized to the incoming genlock signal. If no input reference signal is detected, the internal oscillator (X3003) generates these signals. Figure C36 shows the simplified block diagram for this circuit.

1) Sync and Burst Separator

When the reference signal is supplied to the genlock connector, the sync separator (IC3001) removes the H sync and supplies that signal to the burst flag generator (IC3003). Then the burst separator (IC3002,IC3006) removes the burst signal from the reference and is sent to the sync generator IC as a reference

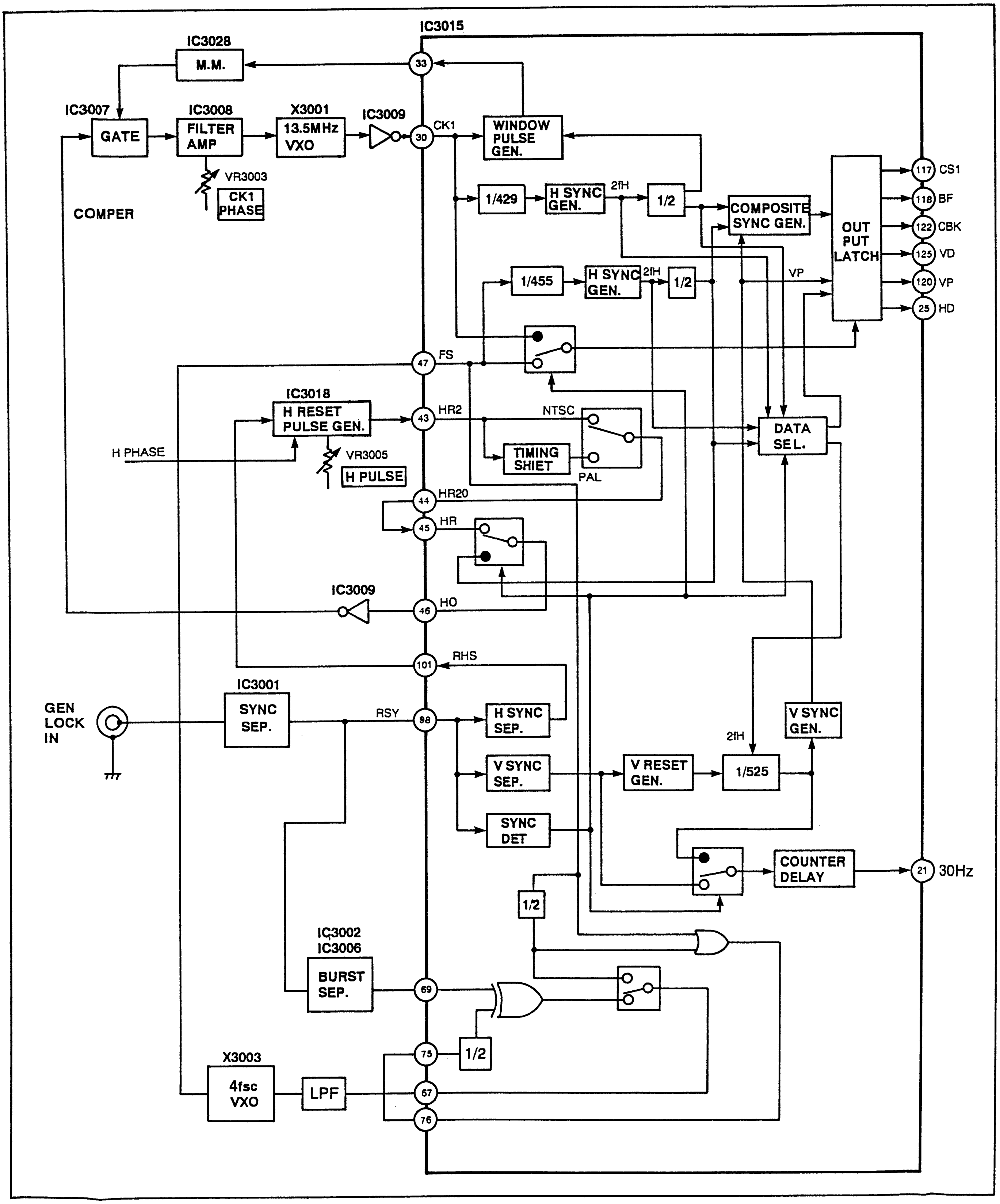

IC3015
IC3028
M.M.
33
IC3007
IC3008
X3001
IC3009
GATE
FILTER AMP
13.5MHz VXO
30
CK1
WINDOW PULSE GEN.
VR3003
CK1 PHASE
COMPER
1/429
H SYNC GEN.
2fH
1/2
COMPOSITE SYNC GEN.
OUT PUT LATCH
117
CS1
118
BF
122
CBK
125
VD
120
VP
25
HD
1/455
H SYNC GEN.
2fH
1/2
VP
47
FS
IC3018
H RESET PULSE GEN.
43
HR2
NTSC
TIMING SHIET
PAL
DATA SEL.
H PHASE
VR3005
H PULSE
44
HR20
45
HR
IC3009
46
HO
101
RHS
IC3001
SYNC SEP.
GEN LOCK IN
RSY
98
H SYNC SEP.
V SYNC SEP.
SYNC DET
V RESET GEN.
2fH
1/525
V SYNC GEN.
COUNTER DELAY
21
30Hz
1/2
IC3002
IC3006
BURST SEP.
69
1/2
75
X3003
4fsc VXO
LPF
67
76

Figure C36 Block Diagram of Sync Generator Circuit

2) Sync Generator PLL

NTSC model

Within the phase lock loop (PLL) X3003 generates a 4fsc signal that is locked to incoming reference signal. If no signal is present, the PLL circuit is in free run. The VD and HD signals are generated based on the 4fsc sub-carrier.

PAL model

The PAL system does not generate an HD signal by division of the 4fsc signal because of 25Hz offset (fsc = 284fH - 1/4fH + 1/265fH), but uses the 13.5MHz VCO (X3001) to generate the HD signal.

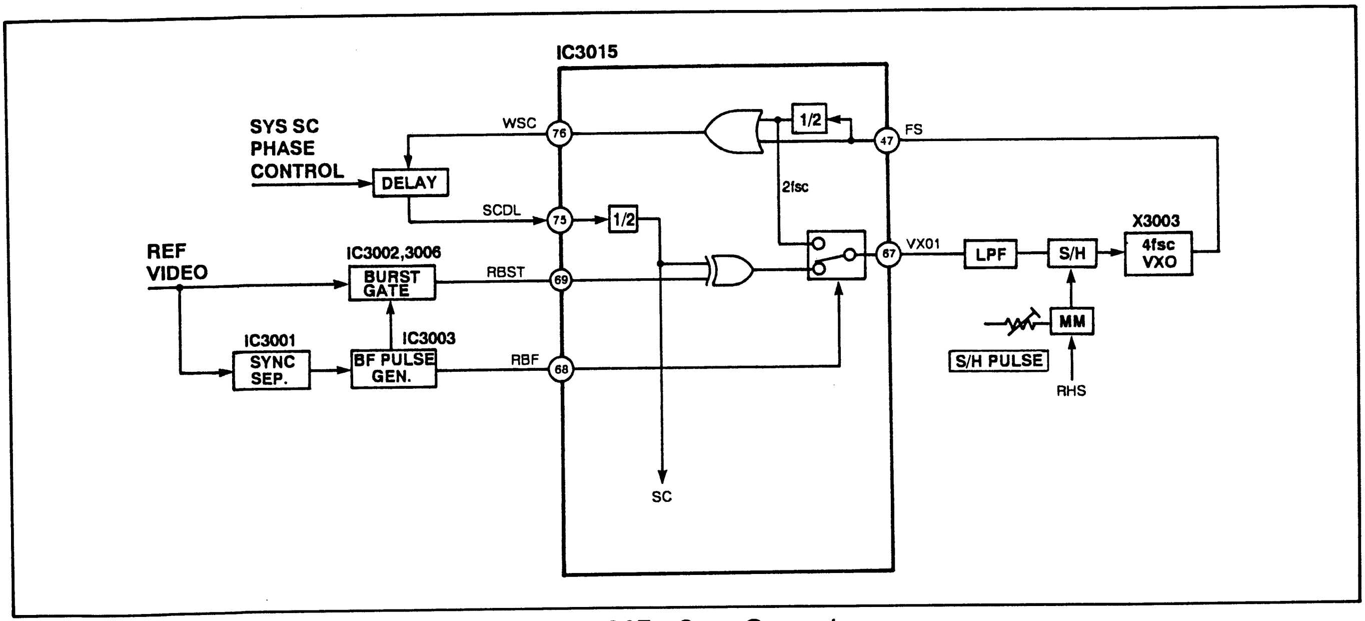

IC3015
SYS SC PHASE CONTROL
DELAY
WSC
76
SCDL
75
1/2
REF VIDEO
IC3002,3006
BURST GATE
RBST
69
IC3001
SYNC SEP.
IC3003
BF PULSE GEN.
RBF
68
SC
1/2
2fsc
47
FS
67
VX01
LPF
S/H
X3003
4fsc VXO
MM
S/H PULSE
RHS

Figure C37 Sync Generator

3) Sub-carrier Generator

X3002 is a 4fsc VCO that generates the sub-carrier. The sub-carrier phase can be adjusted by system SC phase potentiometer on the side panel. This adjustment is necessary to compensate sub-carrier timing difference, caused by cable delay if the camera is to be timed within a system.

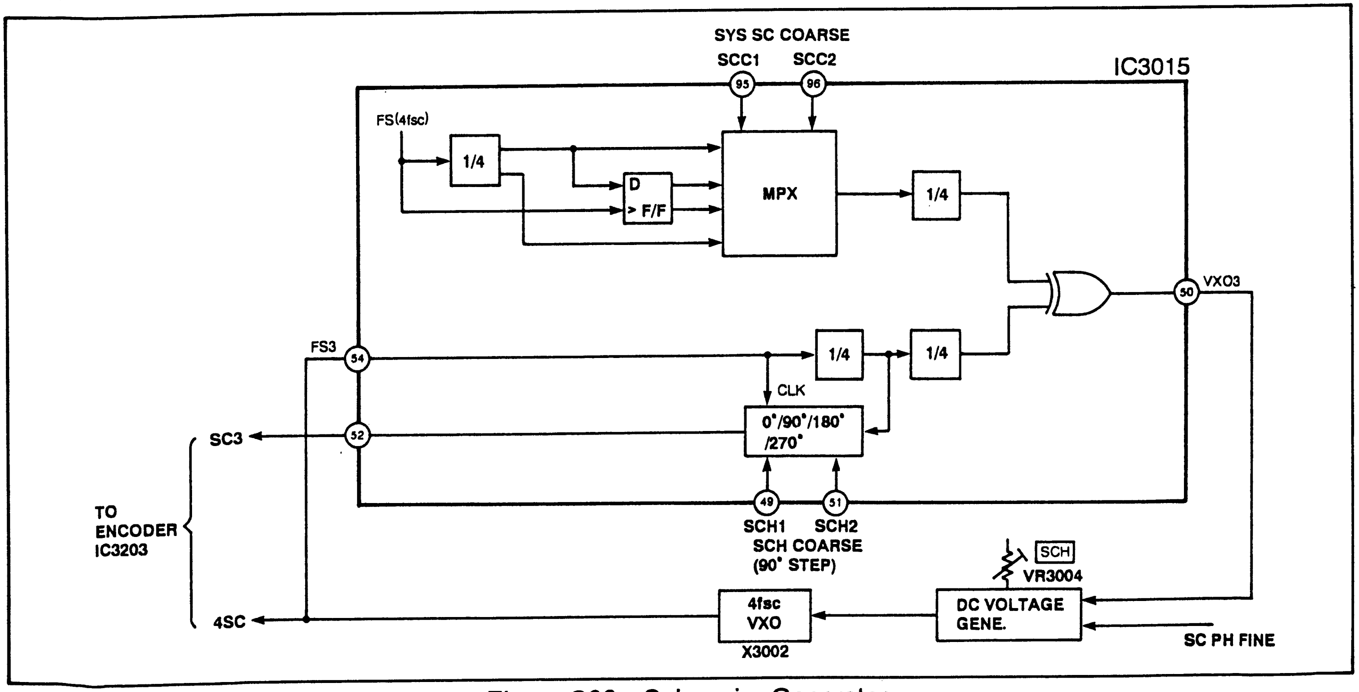

SYS SC COARSE
SCC1
SCC2
95
96
IC3015
FS(4fsc)
1/4
D
> F/F
MPX
1/4
VXO3
50
FS3
54
1/4
1/4
CLK
0°/90°/180° /270°
SC3
52
TO ENCODER IC3203
49
51
SCH1
SCH2
SCH COARSE (90° STEP)
SCH
VR3004
4SC
4fsc VXO
X3002
DC VOLTAGE GENE.
SC PH FINE

Figure C38 Subcarrier Generator

2. VIDEO CIRCUIT

[General Description]

1) Luminance Circuit

The video circuit consists of luminance and chrominance circuits. The luminance circuit converts the Y signal (sent from the camera block) to FM signal in order to compress the frequency range. The unit employs the S-VHS system to provide higher picture quality, which is achieved by rising the FM carrier frequency of luminance signal. (3.5 MHz - 4.5 MHz to 5.4 MHz - 7.0 MHz (NTSC) / 3.8 MHz - 4.8 MHz to 5.4 MHz - 7.0 MHz (PAL)). See Figure V1.
As a result, the S-VHS system offers well over 400 lines of horizontal resolution, as oppose to normal VHS, which is only about 240 lines (PAL 250 lines). Due to the higher carrier shift of S-VHS, some circuits such as sub-emphasis, must have different characteristics from the VHS system. These circuits must be therefor be switchable depending on the S-VHS or VHS mode.

2) Chrominance Circuit

The chrominance circuit modulates the R-Y and B-Y signals sent from the camera block to 3.58 MHz (NTSC)/ 4.43 MHz (PAL). Then this chrominance signal is converted to a low frequency 629 KHz (NTSC) / 627 KHz (PAL) with phase rotation, in order to cancel out crosswalk from adjacent tracks. See Figure V1.

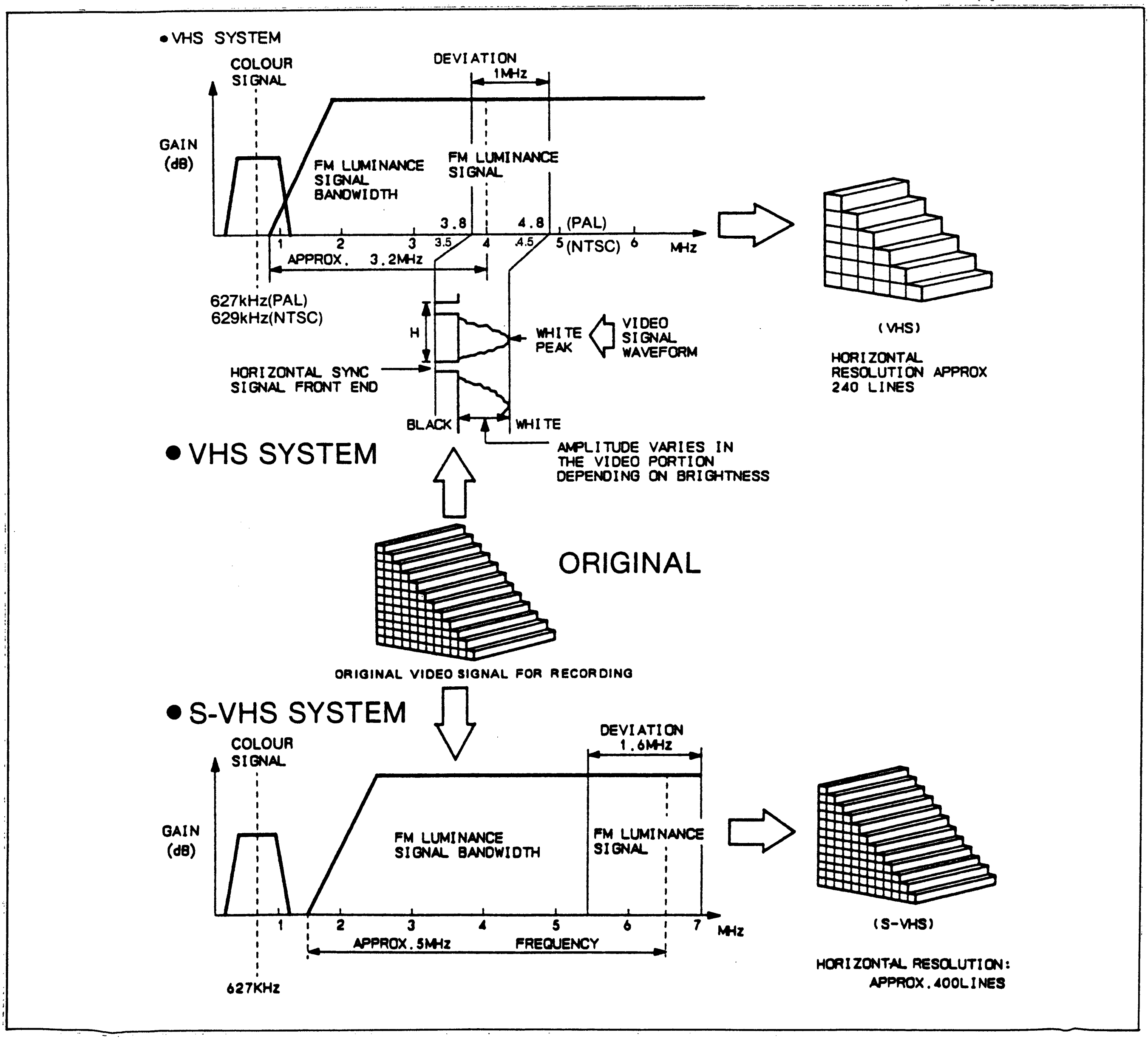

• VHS SYSTEM
COLOUR SIGNAL
DEVIATION
1MHz
GAIN (dB)
FM LUMINANCE SIGNAL BANDWIDTH
FM LUMINANCE SIGNAL
3.8
4.8
(PAL)
1
2
3
3.5
4
4.5
5 (NTSC)
6
MHz
APPROX. 3.2MHz
627kHz(PAL)
629kHz(NTSC)
H
WHITE PEAK
VIDEO SIGNAL WAVEFORM
HORIZONTAL SYNC SIGNAL FRONT END
BLACK
WHITE
AMPLITUDE VARIES IN THE VIDEO PORTION DEPENDING ON BRIGHTNESS
(VHS)
HORIZONTAL RESOLUTION APPROX 240 LINES
• VHS SYSTEM
ORIGINAL
ORIGINAL VIDEO SIGNAL FOR RECORDING
• S-VHS SYSTEM
COLOUR SIGNAL
DEVIATION
1.6MHz
GAIN (dB)
FM LUMINANCE SIGNAL BANDWIDTH
FM LUMINANCE SIGNAL
1
2
3
4
5
6
7
MHz
APPROX.5MHz
FREQUENCY
627KHz
(S-VHS)
HORIZONTAL RESOLUTION: APPROX.400LINES

Figure V1 frequency Range of S-VHS/VHS

2-1. Luminance Circuit Operation

Figure V2. shows a block diagram of the luminance circuit. the IC3001 incorporates all luminance operations within 1 chip.
Each circuits operation is as follow;

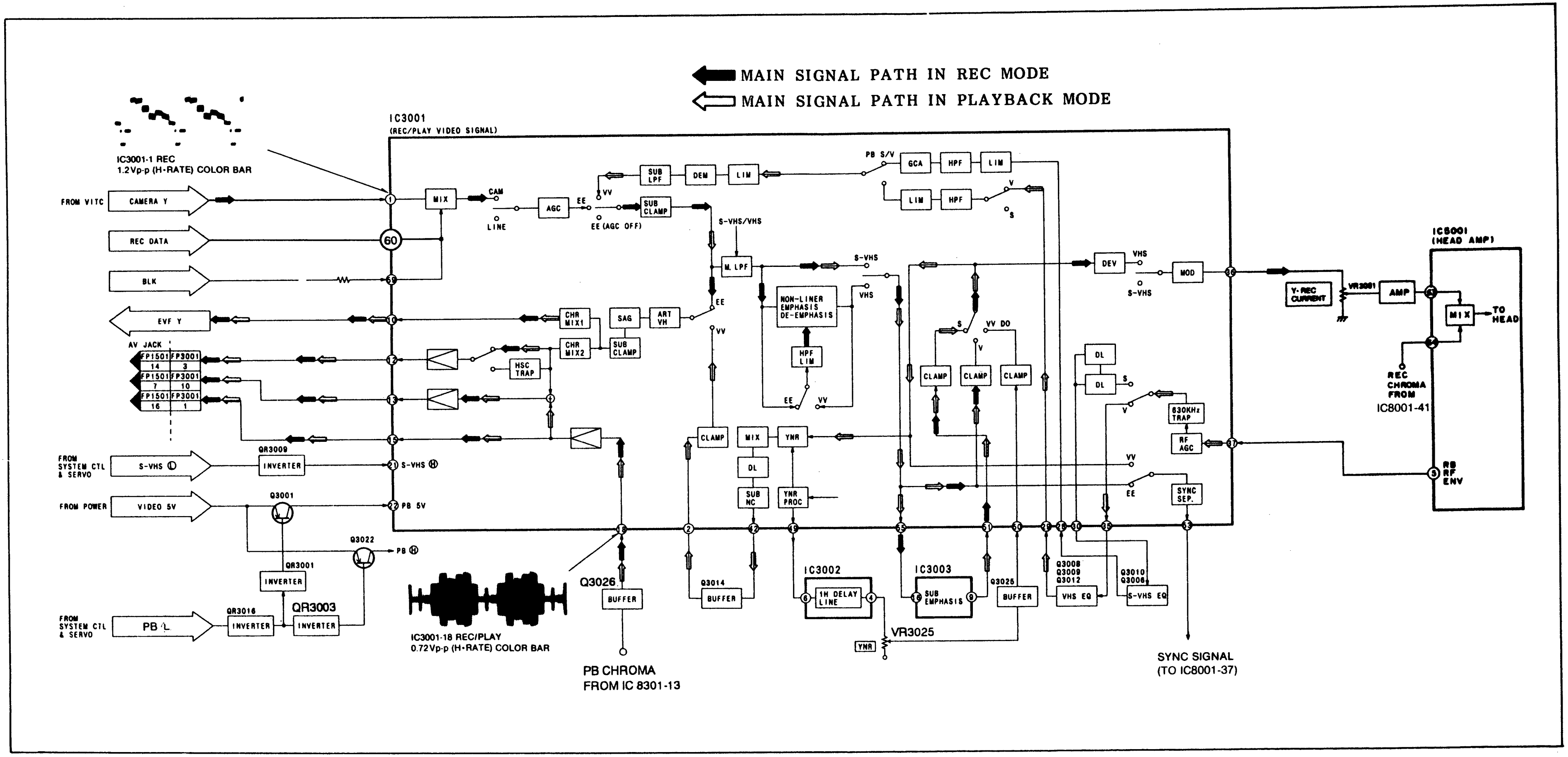

MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
IC3001-1 REC
1.2Vp-p (H-RATE) COLOR BAR
IC3001
(REC/PLAY VIDEO SIGNAL)
FROM VITC
CAMERA Y
REC DATA
BLK
EVF Y
AV JACK
FP1501 FP3001 14 3
FP1501 FP3001 7 10
FP1501 FP3001 16 1
FROM SYSTEM CTL & SERVO
S-VHS Ⓛ
QR3009
INVERTER
S-VHS Ⓗ
FROM POWER
VIDEO 5V
Q3001
PB 5V
Q3022
PB Ⓗ
QR3001
INVERTER
FROM SYSTEM CTL & SERVO
PB Ⓛ
QR3016
INVERTER
QR3003
INVERTER
IC3001-18 REC/PLAY
0.72Vp-p (H-RATE) COLOR BAR
Q3026
BUFFER
PB CHROMA
FROM IC 8301-13
MIX
CAM
LINE
AGC
EE
EE (AGC OFF)
VV
SUB LPF
DEM
LIM
SUB CLAMP
PB S/V
GCA
HPF
LIM
LIM
HPF
V
S
S-VHS/VHS
M. LPF
S-VHS
VHS
NON-LINER EMPHASIS DE-EMPHASIS
HPF LIM
EE
VV
CHR MIX1
SAG
ART VH
CHR MIX2
SUB CLAMP
HSC TRAP
EE
VV
CLAMP
MIX
YNR
DL
SUB NC
YNR PROC
Q3014
BUFFER
IC3002
1H DELAY LINE
VR3025
YNR
IC3003
SUB EMPHASIS
Q3025
BUFFER
S
VV DO
V
CLAMP
CLAMP
CLAMP
DEV
VHS
S-VHS
MOD
DL
DL
S
V
630KHz TRAP
RF AGC
VV
EE
SYNC SEP.
Q3008
Q3009
Q3012
VHS EQ
Q3010
Q3006
S-VHS EQ
SYNC SIGNAL
(TO IC8001-37)
Y-REC CURRENT
VR3001
AMP
IC8001
(HEAD AMP)
MIX
TO HEAD
REC CHROMA FROM
IC8001-41
RB RF ENV
1
60
59
10
12
13
15
21
22
18
2
42
49
55
51
50
29
28
30
35
53
36
37
6
4
16
9
5

Figure V2 Block Diagram of Luminance Circuit

1) Character Mix Circuit

The incoming luminance signal (Y) is supplied to pin 1 of IC3001 and mixed with character (REC DATA) which is sent from OSD microprocessor IC6503.

2) AGC (Auto Gain Control)

AGC maintains the incoming signal level by monitoring the sync and peak levels of the signal and not allowing them to exceed the saturation point and cause over-modulation.

3) Clamp Circuit

Clamp circuit stabilizes the DC components of the sync level by not allowing the sync tip frequency to fluctuate after FM modulation.

4) LPF (Low Pass Filter)

This filter removes the high frequency noise in the incoming signal. The frequency range of filter changes depending on the S-VHS or VHS mode.

S-VHS: 5 MHz (NTSC/PAL)
VHS: 3 MHz (NTSC) / 4 MHz (PAL)

5) S-VHS/VHS Selection

IC3001-21 switches the S-VHS/VHS switch in IC3001, which is sent from IC6501 and is inverted by QR3009.

S-VHS mode: IC3001 - 21 (H)
VHS mode: IC3001 - 21 (L)

In recording mode, the microprocessor detects the S-VHS/VHS mode by using a mechanical switch (for tape detection) and user key operation. In playback mode, detection is done automatically by IC3001 monitoring the recorded frequency.

6) Non-linear Emphasis Circuit

This circuit used only for the VHS mode, boosts the level of higher frequency components to improve the S/N ration. The circuit boosts the lower level signal more than the higher level signal.
The characteristics of non-linear emphasis are shown in Figure V3.

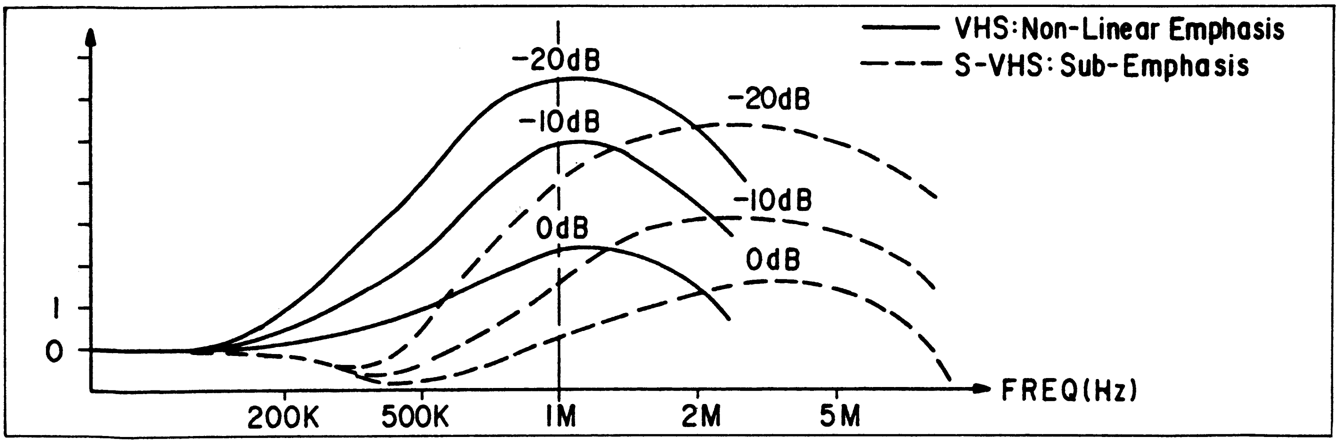


Figure V3 characteristics of Non-Linear / Sub Emphasis

7) Sub-Emphasis Circuit

This circuit is used for S-VHS mode. This circuits purpose is the same as that of the non-linear emphasis circuit, however, the frequency response is higher because the frequency of the incoming signal is higher than VHS.
This circuit also attenuate the low band and large input signal so as to prevent signal loss of edge portion in the white clip circuit.

8) Main Emphasis Circuit

This circuit again boosts the higher frequency signal, regardless of the level of the incoming signal, so as to improve the S/N ratio.

9) Deviation Circuit

This circuit restricts the level (peak to peak) of the incoming signal which is then modulated to an FM signal. This circuit adjusts the peak level and range of signal, depending on the S-VHS or VHS mode. Wider peak-to-peak signal have wider frequency deviation after frequency modulation.

10) FM MOD (Frequency Modulation)

This circuit modulates the incoming signal to an FM signal. The higher level is modulated to a higher frequency.

S-VHS: 5.4 MHz - &.0 MHz (PAL/NTSC)
VHS: 3.8 MHz - 4.8 MHz (PAL)
3.5 MHz - 4.5 MHz (NTSC)

11) Y REC Current Adjustment

Adjusts the recording current to prevent excess current from saturating the signal.

12) Head Amplifier

Head amplifier IC5001 mixes the luminance signal (IC5001 -63) with the chrominance signal (IC5001-64), amplifier it, and sends it to the rotary video heads for recording. Due to the small cylinder diameter, four head switching is performed in this IC.

13) Four Head Switching (CTSW: Cross Talk Switching)

<Outline>

a. The diameter and tape wrapping angle is different from conventional tabletop cylinders. (See Figure V4.).

b. In order to have compatibility, the cylinder unit has 4 video heads for recording and playback. Three heads are always in contact with the tape. (A conventional cylinder has 2 heads, with only one head always in contact with the tape.)

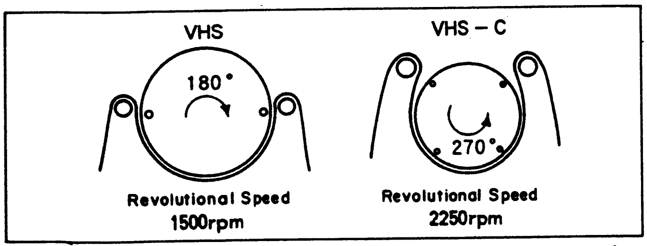

VHS
VHS – C
180°
270°
Revolutional Speed
1500rpm
Revolutional Speed
2250rpm

Figure V4 Comparison Table VTR and VHS movie

c. Therefor, recording current is not supplied to the head all the time, as in conventional systems.

d. The recording current is switched and supplied to the effective head for recording, which is performed by CTSW1 to CTSW4. Also in the playback mode, the effective head is selected by CTSW1 to CTSW4. (See Figure V5).

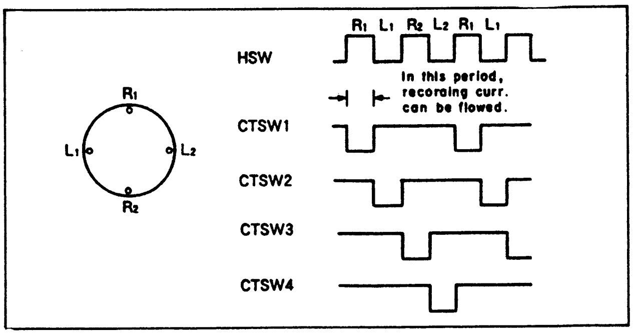

R1 L1 R2 L2 R1 L1
HSW
In this period, recording curr. can be flowed.
R1
L1
L2
R2
CTSW1
CTSW2
CTSW3
CTSW4

Figure V5 Relation between Head Switching Pulse and CTSW

<Operation>

a. The H.SW, H.A.SW and VORP (Video Overlap) pulses (which are sent from servo IC6001) are supplied to the logic block, and CTSW pulses are produced, as shown in Figure V6).

b. These CTSW pulses are supplied to Q5001 and Q5002 from pin 16, 21, 25, 30 of IC5001. (See Figure V7.)

c. If CTSW1 (low signal) is supplied to Q5001-A, this transistor turns off and the recording current is supplied to the R1 head. At the same time, transistors are turned on both side of the R1 head so that the heads are shorted and recording current can not be supplied to them. In playback mode the shorted heads can not take out the output signal.

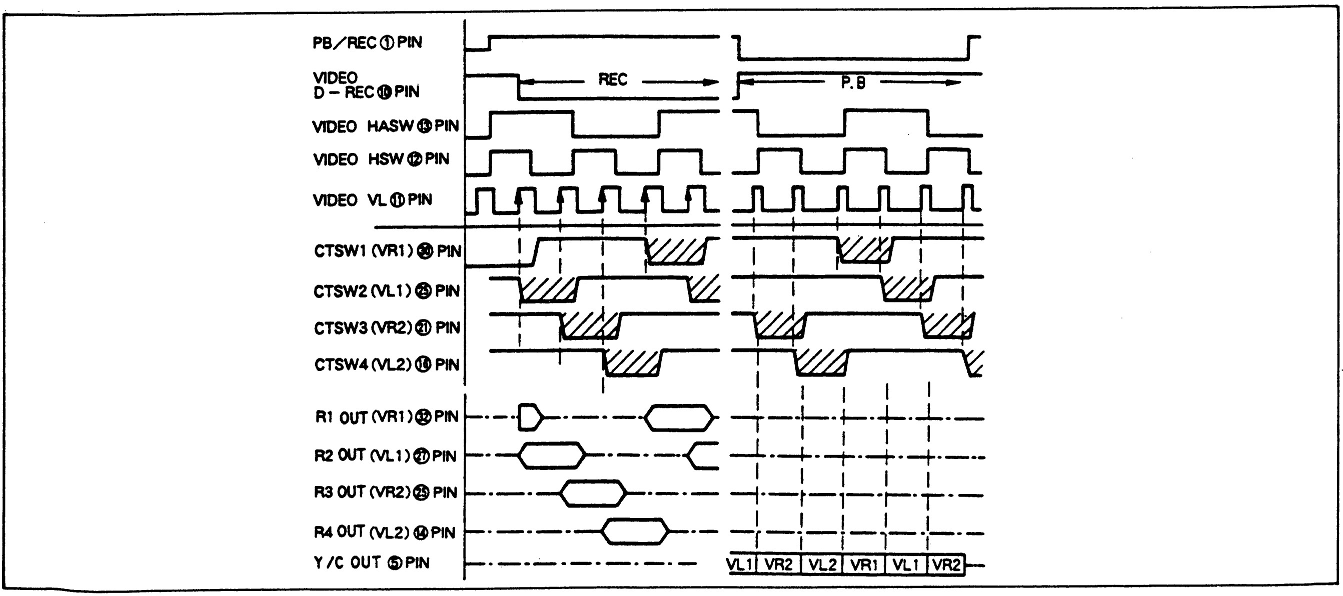

PB/REC ① PIN
VIDEO D – REC ⑩ PIN
VIDEO HASW ⑬ PIN
VIDEO HSW ⑫ PIN
VIDEO VL ⑪ PIN
CTSW1 (VR1) ㉚ PIN
CTSW2 (VL1) ㉕ PIN
CTSW3 (VR2) ㉑ PIN
CTSW4 (VL2) ⑯ PIN
R1 OUT (VR1) ㉜ PIN
R2 OUT (VL1) ㉗ PIN
R3 OUT (VR2) ㉕ PIN
R4 OUT (VL2) ⑭ PIN
Y / C OUT ⑤ PIN
REC
P.B
VL1 VR2 VL2 VR1 VL1 VR2

Figure V6 Timing Chart for CTSW Pulses Production

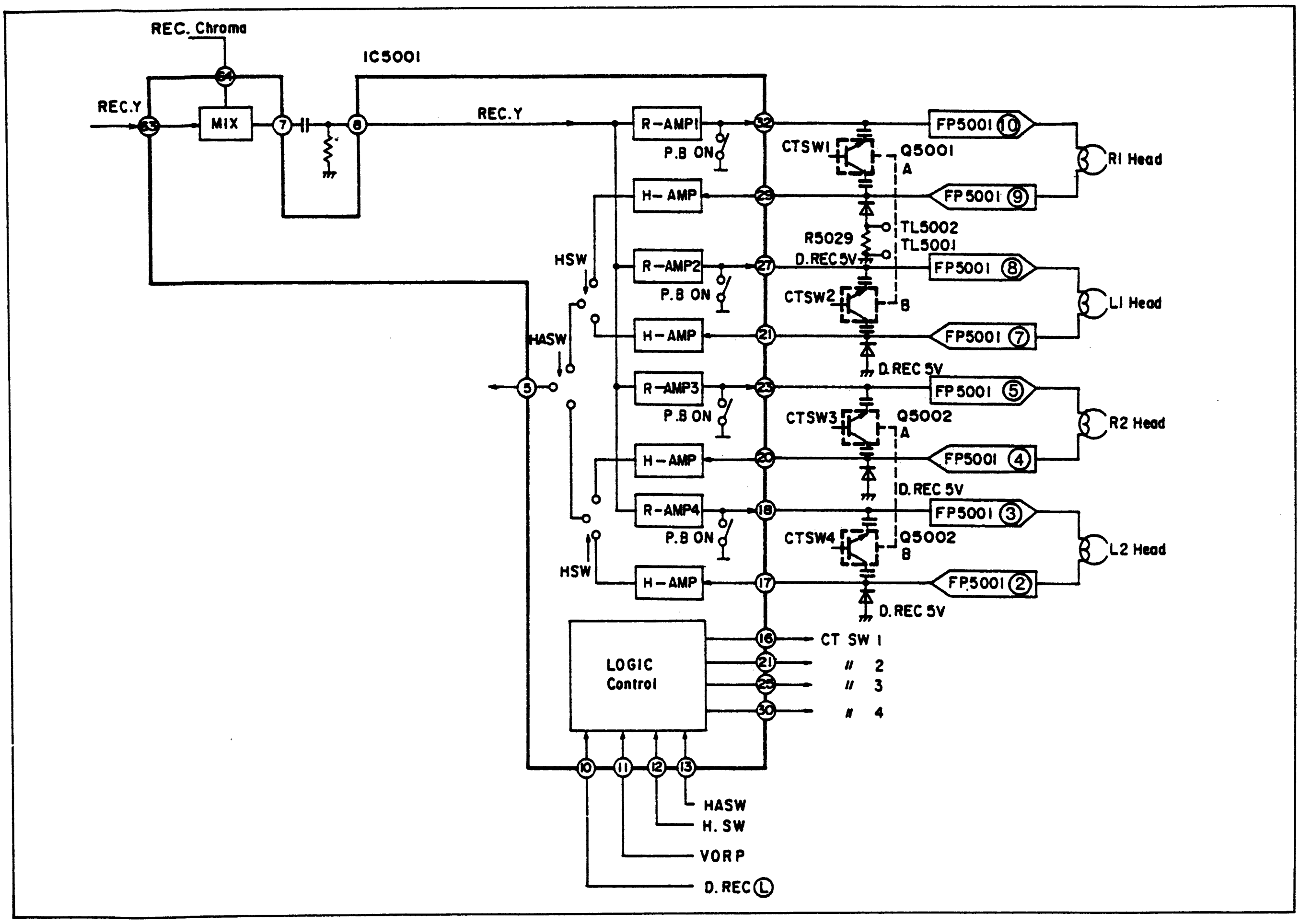

REC. Chroma
IC5001
REC.Y
MIX
REC.Y
R-AMP1
P.B ON
H-AMP
HSW
R-AMP2
P.B ON
H-AMP
HASW
R-AMP3
P.B ON
H-AMP
R-AMP4
P.B ON
HSW
H-AMP
CTSW1
Q5001 A
R5029
D.REC 5V
TL5002
TL5001
CTSW2
B
D.REC 5V
CTSW3
Q5002 A
D.REC 5V
CTSW4
Q5002 B
D.REC 5V
FP5001 ⑩
FP5001 ⑨
FP5001 ⑧
FP5001 ⑦
FP5001 ⑤
FP5001 ④
FP5001 ③
FP5001 ②
R1 Head
L1 Head
R2 Head
L2 Head
LOGIC Control
CT SW 1
" 2
" 3
" 4
HASW
H. SW
VORP
D. REC Ⓛ

Figure V7 Head Amp Circuit

2-2. Luminance Playback Operation

1) Head Amplifier

IC5001 amplifies the video signal received by the 4 rotary heads and switches the effective head out by CTSW, H.SW and H.A.SW pulses.

In the playback mode, the switches in IC5001 which are connected to one side of the video head are turned on. D.REC 5V (delayed REC 5V) is not supplied; therefor, the signal from video heads are applied to head amplifier IC5001. These signals are selected sequentially and combined together by H.SW and H.A.SW pulses, as shown in Figure V7. and V8.

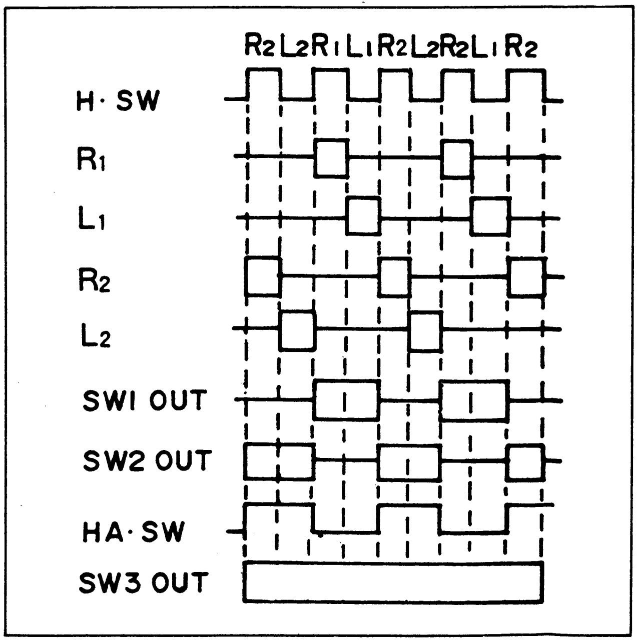

R2 L2 R1 L1 R2 L2 R2 L1 R2
H·SW
R1
L1
R2
L2
SW1 OUT
SW2 OUT
HA·SW
SW3 OUT

Figure V8 Output of Head Amplifier

2) 627 (PAL) /629 (NTSC) KHz Trap

The playback signal from head amplifier IC5001-5 includes luminance and chrominance components. The chrominance signal is eliminated by this 627KHz (PAL) / 629KHz (NTSC) filter.

3) S-VHS/VHS Detector

This circuit senses whether the system was recorded in the S-VHS or VHS mode by monitoring the carrier frequency of RF ENV signal. Figure V9. shows the S-VHS/VHS detection circuit. In playback mode, the RF signal from head amp is supplied to IC3001-37 and is amplified by RF AGC and then supplied to the peak amplifier, which has a 5.5MHz peak. S/V detector detects if these are large enough 5.5MHz components.
Since S-VHS frequency range is 5.4MHz to 7.0MHz and VHS is 3.8MHz to 4.8MHz (PAL) / 3.4MHz to 4.4 MHz (NTSC), if the level of 5.5MHz is high, it means S-VHS recording. The S/V detector generates a high signal for S-VHS mode.

In recording mode, IC6004 detects the key operation (if S-VHS is selected in the menu) and mechanical switch for S-VHS cassette detection, and sends a VHS low signal to IC3001-21.

RF ENV signal is also used to judge the tracking condition for servo control (IC3001-21).

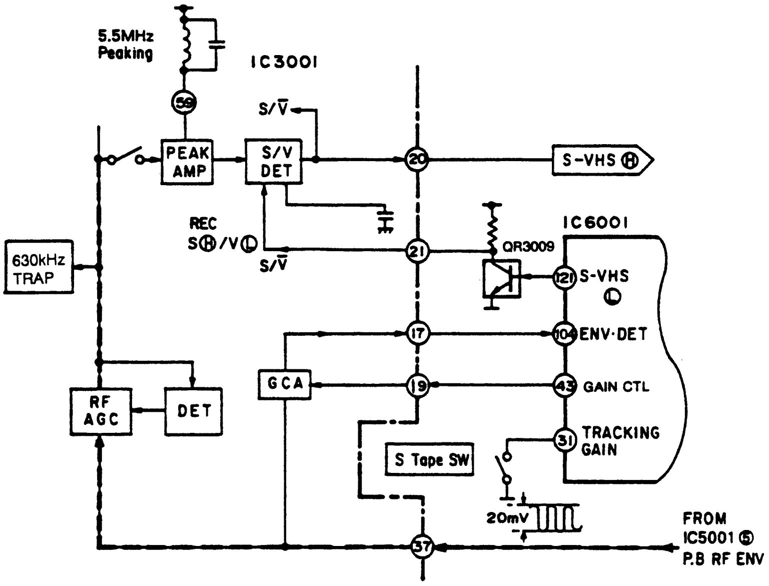


Figure V9 S-VHS Detection

4) S-VHS/VHS Equalizer

Since higher frequencies cannot be recorded and played back well due to head characteristics, the higher frequency must be boosted so as not to be carrier lost (See Figure V10).

For the S-VHS a peak frequency of approximately 7.8MHz is boosted by using the peak amplifier, which is organized by two delay lines and transistors.
In the VHS, approx. 4.7MHz is boosted.

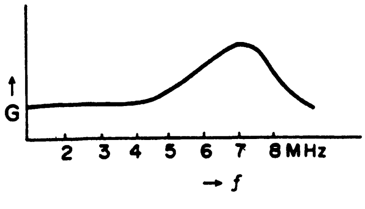


Figure V10 Characteristics of S-VHS Equalizer Amp

5) Double Limiter (D.LIM)

When a large drop of the FM carrier occurs during playback, the double Limiter recovers the carrier signal loss.

6) FM Demodulator (DEM)

Returns the recorded FM signal to the original AM signal.

7) De-Emphasis

The incoming video signal that had the higher frequency emphasized by attenuating the higher frequency signal to the original level (the converse of the emphasis operation).

8) Y Noise Reduction (YNR)

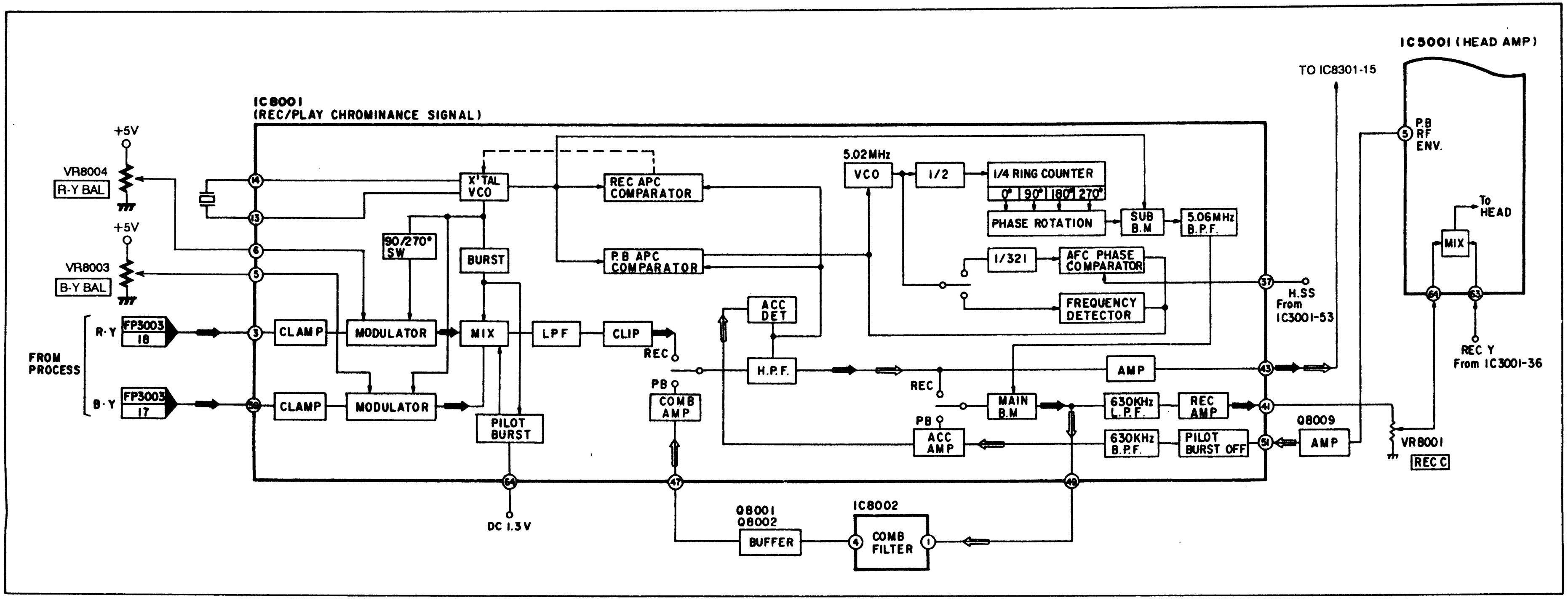
Reduce the noise by using a 1H delay line to detect the parts of the signal that are the same and cancel the noise.

9) Y/C Mix

The playback luminance signal is mixed with the playback chrominance signal sent from IC8001-43 to IC3001-18, and it becomes the video signal which is supplied to the output.

2-3. Chrominance Circuit Operation

The block diagram of chrominance circuit is shown in Figure V.11.



IC8001
(REC/PLAY CHROMINANCE SIGNAL)
+5V
VR8004
R-Y BAL
+5V
VR8003
B-Y BAL
FROM PROCESS
R·Y
FP3003
18
B·Y
FP3003
17
14
13
6
5
3
50
CLAMP
CLAMP
MODULATOR
MODULATOR
90/270° SW
X'TAL VCO
BURST
MIX
PILOT BURST
LPF
CLIP
REC
PB
COMB AMP
REC APC COMPARATOR
P.B APC COMPARATOR
ACC DET
H.P.F.
64
DC 1.3V
47
Q8001
Q8002
BUFFER
IC8002
4
COMB FILTER
1
5.02MHz
VCO
1/2
1/4 RING COUNTER
0° 90° 180° 270°
PHASE ROTATION
SUB B.M
5.06MHz B.P.F.
1/321
AFC PHASE COMPARATOR
FREQUENCY DETECTOR
AMP
REC
MAIN B.M
630KHz L.P.F.
REC AMP
PB
ACC AMP
630KHz B.P.F.
PILOT BURST OFF
49
37
H.SS
From IC3001-53
43
41
51
TO IC8301-15
Q8009
AMP
VR8001
REC C
IC5001 (HEAD AMP)
5
P.B RF ENV.
To HEAD
MIX
64
63
REC Y
From IC3001-36

Figure V11 Block Diagram of Chrominance Circuit

9) AFC Phase Comparator

The AFC circuit detects the phase difference between the incoming horizontal sync (IC8001-37) and the internal Fh (counted down VCO's 5.02 MHz), to generate a VCO of 5.02 MHz with the same phase as the incoming sync for PAL.

2-4. Chrominance Playback Operation

1) Pilot Burst Off (PAL model only)

This circuit eliminates the pilot burst signal that was inserted in the REC mode.

2) 630 KHz LPF

630 KHz low pass filter passes the only played back chroma signal.

3) Main B.M.

The input signals are the same as in record mode. One is the 627 KHz (PAL) / 629 KHz (NTSC) playback signal, and the other is 5.06 MHz (PAL) / 4.2 MHz (NTSC) signal. The output is the 4.43 MHz (PAL) / 3.58 MHz (NTSC) original frequency and 5.68 MHz (PAL) / 4.83 MHz (NTSC), which is later cut out.

4) Comb Filter

The comb filter has special frequency responses so that like a comb, it passes only pure chroma signal (noise is cut), which is used to cancel the crosstalk noise adjacent tracks.

5) HPF

The high pass filter allows only the 4.43 MHz (PAL) / 3.58 MHz (NTSC) chroma signal to pass from the two frequencies which are supplied from the output of the B.M.. The rest of the block is the same as the recording circuit; the playback chroma signal finally is sent from IC8001-43 to IC3001-18 to be mixed with luminance signal.

Panasonic®

Printed in Japan
F417002NTkD190

V16695

! Warning
This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advice non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service manual by anyone else could result in serious injury or death.

Order No. VSD9710S201
D4

Service Manual

Supplement

NTSC/PAL **Video Product**

Subject : Adjustment Procedures by PC-EVR

Please use this supplement together with the Service Manual as follows :

Model No.	Bulletin No.	Order No.	Effective from
AG-DP800P	61	VSD9406M252A/B	First Production
AG-DP800HP	64	VSD9406M252C	First Production
AG-DP800E	50	VSD9408M636A/B	First Production
AG-DP800HE	54	VSD9408M636C	First Production
AG-DP800HEG	48	VSD9408M636C	First Production

This supplement introduces the adjustment procedures by PC-EVR.

The following items can be adjusted by PC-EVR.

7-2-9. Y Gain Adjustment
7-2-20. 9dB AGC R.B Level Adjustment
7-2-21. 18dB AGC R.B Level Adjustment
7-2-22. 24dB AGC R.B Level Adjustment
7-2-24. ABB Offset Adjustment

Furthermore ALC (Auto Lens iris Control) Level can be adjusted by PC-EVR.

Panasonic

© 1997 Matsushita Electric Industrial Co., Ltd. All rights reserved.
Unauthorized copying and distribution is a violation of law.

CONTENTS

1-1. CONNECTION ········· 1

1-2. How to start the PC-EVR Software ········· 4

1-3. Ending Method ········· 7

2. Reading and Writing of EEPROM/RAM Data ········· 8

3-1. How to store the data of EEPROM in the floppy disk ········· 10

3-2. How to write the data of floppy disk to the EEPROM ········· 12

4. How to control the camera ········· 14

5. Electrical Adjustment of the Camera Part (Digital Part) ········· 15

  5-1. Y Gain Adjustment ········· 16

  5-2. 9dB AGC R.B Level Adjustment ········· 18

  5-3. 18dB AGC R.B Level Adjustment ········· 21

  5-4. 24dB AGC R.B Level Adjustment ········· 22

  5-5. ABB Offset Adjustment ········· 23

  5-6. ALC Level Adjustment ········· 27

6. Send "Communication Program" to I/F. ········· 29

1-1. CONNECTION

※ This section describes the connection of adjustments by PC-EVR.

※ Be careful not to short-circuit when connecting.

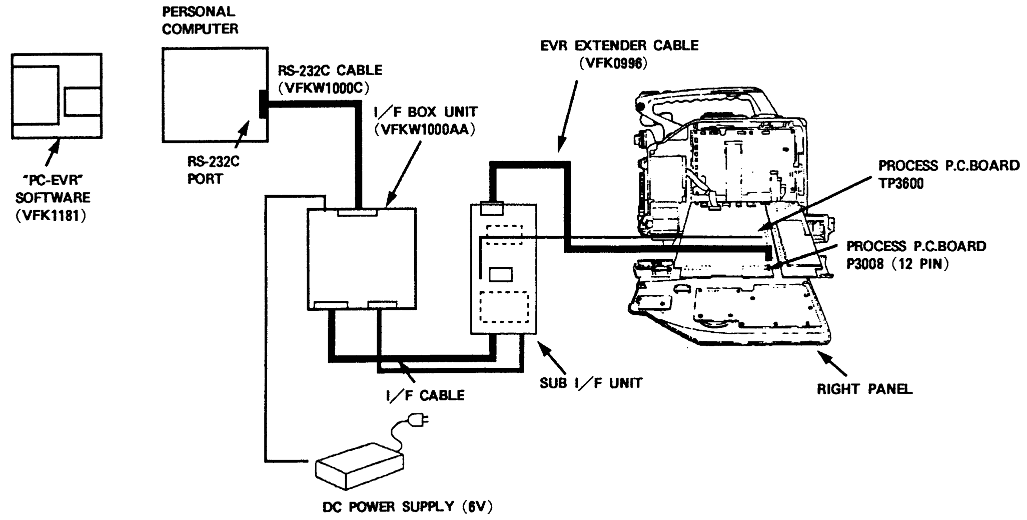
※ Personal Computer and DC Power Supply (6V) are required for adjustments by PC-EVR.
Personal Computer : IBM compatible, CPU i80386 (or higher) with 1 Mbyte RAM (or higher)

STEP 1 PREPARATION

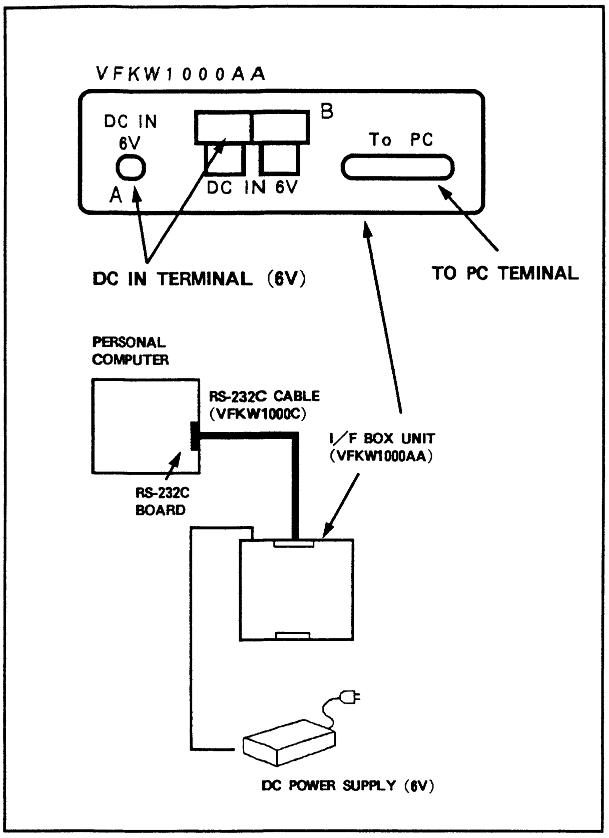
Prepare the following service & test equipments for PC-EVR adjustments.

※ These are for PC-EVR adjustments. Please refer to the service manual of AG-DP800 concerning other service & test equipments.

• I/F BOX UNIT	(VFKW1000AA)
• SUB I/F UNIT	(VFK1180)
• EVR EXTENDER CABLE	(VFK0996)
• RS-232C CABLE	(VFKW1000C)
• "PC-EVR" SOFTWARE	(VFK1181)


PERSONAL COMPUTER
RS-232C CABLE (VFKW1000C)
I/F BOX UNIT (VFKW1000AA)
EVR EXTENDER CABLE (VFK0996)
"PC-EVR" SOFTWARE (VFK1181)
RS-232C PORT
PROCESS P.C.BOARD TP3600
PROCESS P.C.BOARD P3008 (12 PIN)
I/F CABLE
SUB I/F UNIT
RIGHT PANEL
DC POWER SUPPLY (6V)

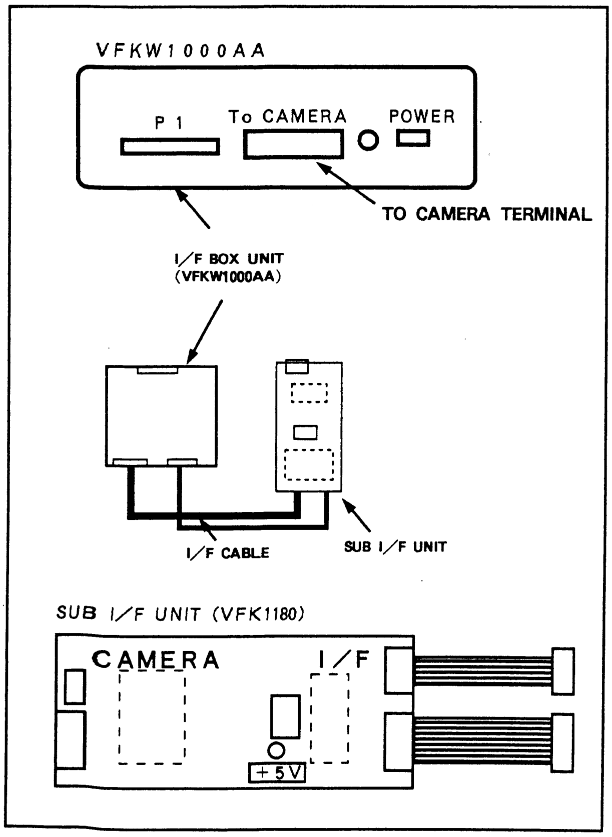
STEP 2


VFKW1000AA
DC IN
6V
B
To PC
A
DC IN 6V
DC IN TERMINAL (6V)
TO PC TEMINAL
PERSONAL COMPUTER
RS-232C CABLE (VFKW1000C)
I/F BOX UNIT (VFKW1000AA)
RS-232C BOARD
DC POWER SUPPLY (6V)

1. Connect the "TO PC" terminal of I/F BOX UNIT to the RS-232C terminal of personal computer with the RS-232C cable.
   ※ Refer to the operating instructions of personal computer concerning the RS-232C of personal computer.

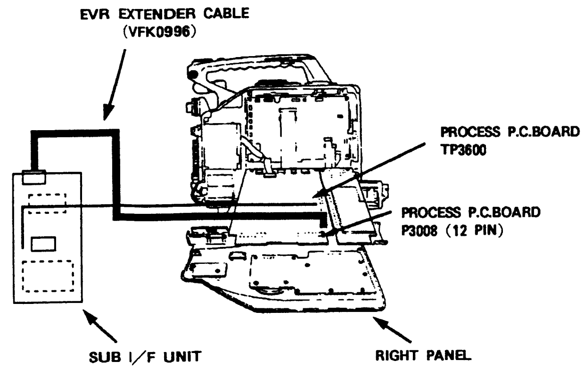
2. Connect the DC POWER SUPPLY (6V) to the DC IN 6V terminal (A or B) of I/F BOX UNIT.

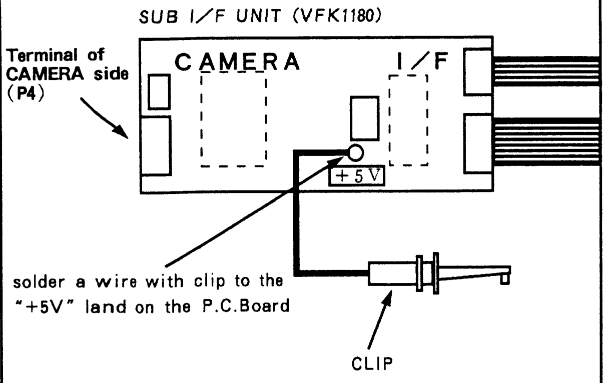
STEP 3

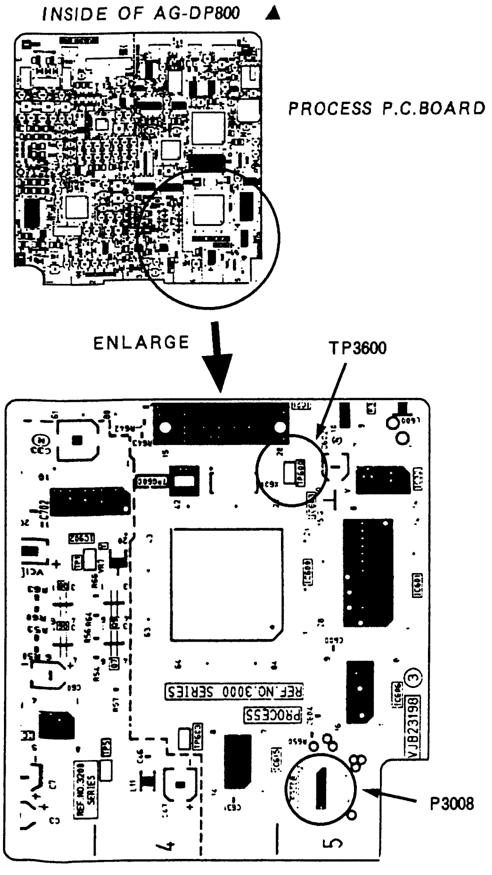

VFKW1000AA
P 1
To CAMERA
POWER
TO CAMERA TERMINAL
I/F BOX UNIT (VFKW1000AA)
I/F CABLE
SUB I/F UNIT
SUB I/F UNIT (VFK1180)
CAMERA
I/F
+5V

1. Connect the I/F cable (7P) of SUB I/F UNIT to "TO CAMERA" terminal of I/F BOX UNIT.
2. Connect the I/F cable (15p) of SUB I/F UNIT to the "P1" terminal of I/F BOX UNIT.

STEP 4


EVR EXTENDER CABLE
(VFK0996)
PROCESS P.C.BOARD
TP3600
PROCESS P.C.BOARD
P3008 (12 PIN)
SUB I/F UNIT
RIGHT PANEL


SUB I/F UNIT (VFK1180)
Terminal of
CAMERA side
(P4)
CAMERA
I/F
+5V
solder a wire with clip to the
"+5V" land on the P.C.Board
CLIP


INSIDE OF AG-DP800 ▲
PROCESS P.C.BOARD
ENLARGE
TP3600
P3008

※ Be sure to turn off each equipment when connecting.

1. Solder a wire with clip to the "+5V" land on the P.C.Board of SUB I/F UNIT.

2. Connect the EVR EXTENDER CABLE to the P4 terminal (6pin) at the "CAMERA" side of SUB I/F UNIT.

3. Connect the connector (12pin) of EVR EXTENDER CABLE to the connector P3008 on the PROCESS P.C.BOARD.

4. Connect the clip with a wire (soldered to the "5V" land) to TP3600 on the PROCESS P.C.Board.

1-2. How to start the PC-EVR Software

※ This section describes the procedures of starting the software "PC-EVR for AG-DP800 Ver1.1".

※ When using other Version, refer to the operating instructions or document file attached to the software.

STEP 1 Power ON

1. Power on the personal computer.

↓

1-2. Start MS-DOS.

↓

2. Power on the I/F UNIT.

↓

3. Power on the AG-DP800.

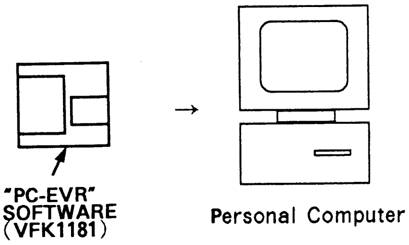
1. Power on each equipment according to the left chart.

※ Before power on, confirm that each equipment is connected correctly and there is no short-circuit.

※ Concerning MS-DOS, prepare by yourself and refer to the operating instructions of the personal computer or the MS-DOS.

Note : The PC-EVR software doesn't work at the MS-DOS mode of Windows 95.

STEP 2 Start the PC-EVR Software.



1. Set the floppy disk to the personal computer.
2. In the condition that the "Prompt" appears, input "A : \" and press Enter key.

   By performing this procedure, the driver changes from C to A.

3. Input "PC-ADJ01" (for NTSC) or "PC-ADJ02" (for PAL) and press Enter key, then the PC-EVR Software starts.

   ※ The above explanation is in the case that the personal computer starts the MS-DOS at the driver "C" and the floppy disk of the PC-EVR Software is set at the driver "A".

   ※ If the composition of personal computer is different from the above one, apply the above operation to the corresponding driver.

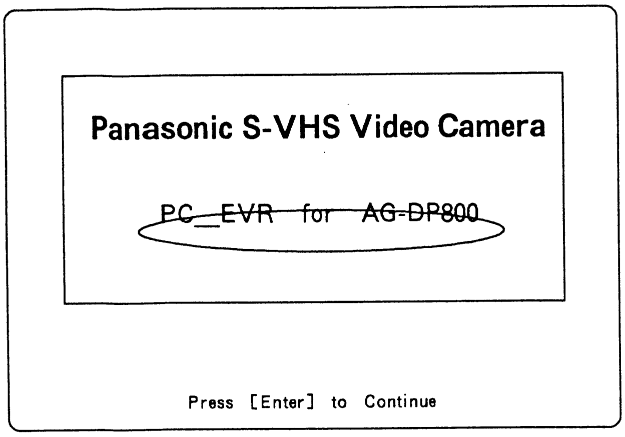
Screen of Personal Computer (NTSC)

```
C:\>  A:\
A:\>  PC-ADJ01
```

Screen of Personal Computer (PAL)

```
C:\>  A:\
A:\>  PC-ADJ02
```

STEP 3 Starting Display



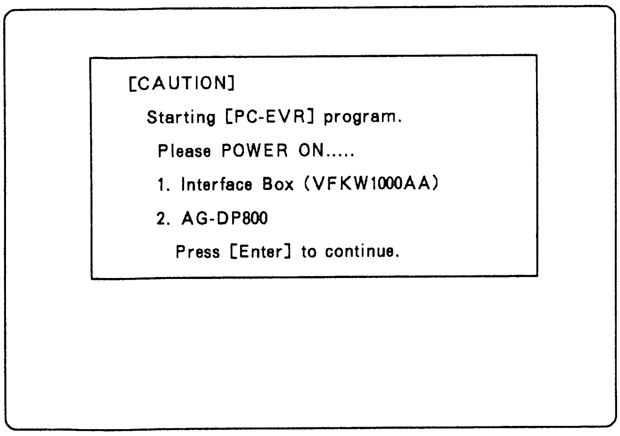
Panasonic S-VHS Video Camera

~~PC_EVR for AG-DP800~~

Press [Enter] to Continue

1. The display shown in the left figure appears 2 or 3 minutes after starting.
2. Press the Enter key.

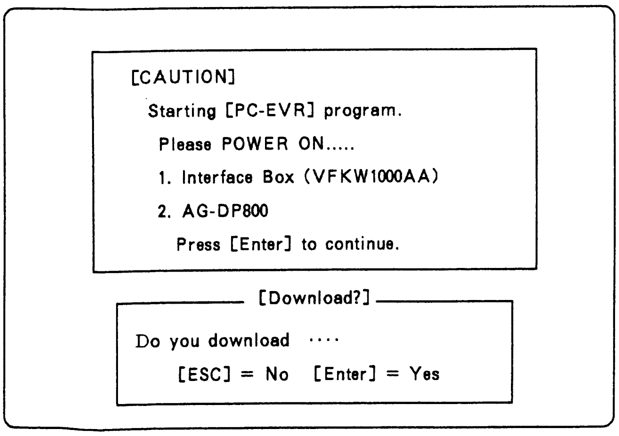
STEP 4



```
[CAUTION]
  Starting [PC-EVR] program.
    Please POWER ON.....
    1. Interface Box (VFKW1000AA)
    2. AG-DP800
       Press [Enter] to continue.
```

1. The display shown in the left figure appears.
2. After Power ON the I/F UNIT and the AG-DP800, press the Enter key.

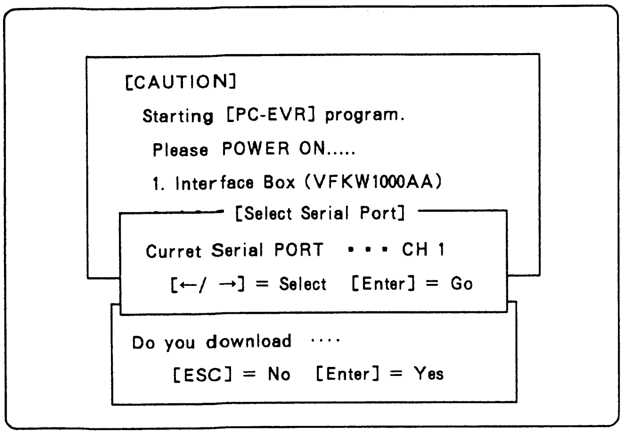
STEP 5



```
[CAUTION]
  Starting [PC-EVR] program.
    Please POWER ON.....
    1. Interface Box (VFKW1000AA)
    2. AG-DP800
       Press [Enter] to continue.

        [Download?]
  Do you download ....
       [ESC] = No   [Enter] = Yes
```

1. Press the Enter key after the display shown in the left figure has appeared.

STEP 6 Select RS-232C port



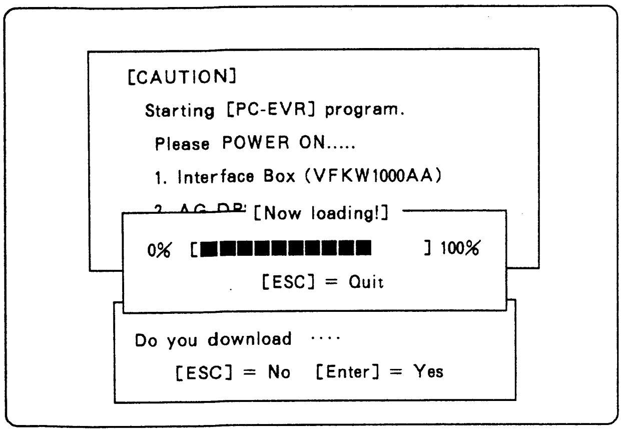
```
[CAUTION]
  Starting [PC-EVR] program.
   Please POWER ON.....
   1. Interface Box (VFKW1000AA)
   ------ [Select Serial Port] ------
   Curret Serial PORT  • • • CH 1
     [←/ →] = Select  [Enter] = Go
 Do you download ····
     [ESC] = No  [Enter] = Yes
```

1. The display shown in the left figure appears.

2. Select the RS-232C port to which the RS-232C cable is connected by the [←] and [→] keys.

3. Press the Enter key.

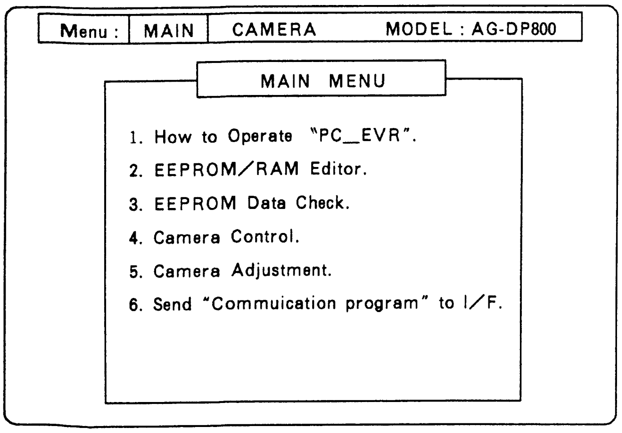
STEP 7 Loading of software



```
[CAUTION]
  Starting [PC-EVR] program.
   Please POWER ON.....
   1. Interface Box (VFKW1000AA)
   2. AG-DP [Now loading!]
 0% [■■■■■■■■■■■       ] 100%
           [ESC] = Quit
 Do you download ····
     [ESC] = No  [Enter] = Yes
```

1. The bar shown in the left figure appears. And it is extending from "0%" to "100%".
2. When the bar has reached to "100%" and the loading of software has been successed, the main menu shown in STEP 8 appears.
3. When the bar has not reached to "100%" and stopped on the way, operate as follows.
   a. End the loading of software by pressing ESC key.
   b. Power off the AG-DP800 and the I/F unit.
   (It is unnecessary to power off the personal computer.)
   c. Try again from STEP 2.
   (Start again after confirming the connection between each instrument, the number of RS-232C port, and so on.)

STEP 8 Main Menu



```
| Menu : | MAIN | CAMERA       MODEL : AG-DP800 |
               MAIN  MENU
   1. How to Operate "PC_EVR".
   2. EEPROM/RAM Editor.
   3. EEPROM Data Check.
   4. Camera Control.
   5. Camera Adjustment.
   6. Send "Commuication program" to I/F.
```

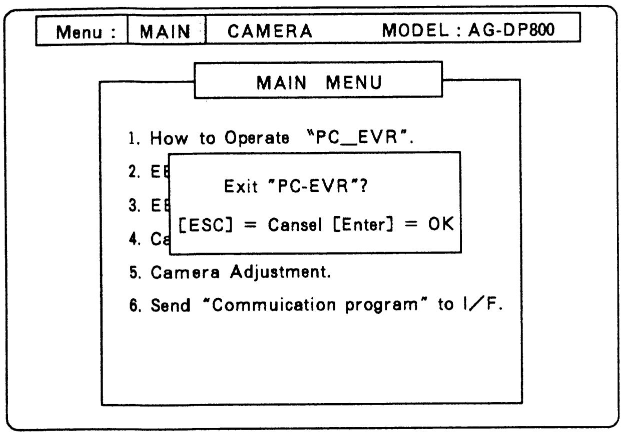
1. The Main Menu appears.

   1. How to Operate "PC-EVR".
      - Explanation of operating "PC-EVR"
   2. EEPROM/RAM Editor.
      - Reading and writing the data of EEPROM/RAM
   3. EEPROM Data Check.
      - Writing the EEPROM data to the floppy disk and reading the EEPROM data from the floppy disk
   4. Camera Control.
      - Remote control of the CAMERA part
   5. Camera Adjustment.
      - Adjustment of the CAMERA part
   6. Send "Communication program" to I/F.
      - Re-transmission of communication program.

1-3. Ending Method

- The ending method of PC-EVR is as follows.

STEP 1



1. How to Operate "PC_EVR".
2. E
3. E
4. C
5. Camera Adjustment.
6. Send "Commuication program" to I/F.

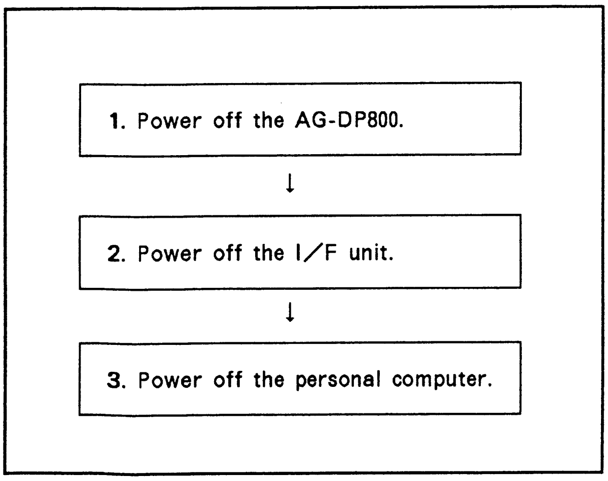
Exit "PC-EVR"?

[ESC] = Cansel [Enter] = OK

1. Press the ESC key when the Main Menu or the CAMERA Adjustment Menu is displayed. Then the display shown in the left figure appears.

2. The PC-EVR ends by pressing the Enter key.
   On the contrary, the display returns to to the Main Menu by pressing not the Enter key but the ESC key.

STEP 2



1. Power off the AG-DP800.

↓

2. Power off the I/F unit.

↓

3. Power off the personal computer.

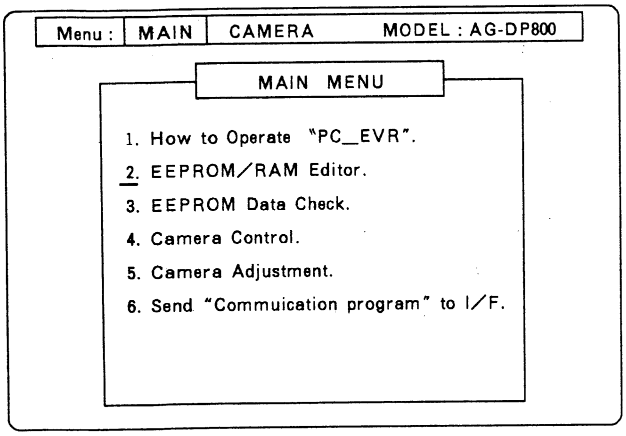
1. Power off the instruments according to the sequence shown in the left figure.

2. Remove the cables and the service & test equipments.

2. Reading and Writing of EEPROM/RAM Data

- Confirmation (reading) of EEPROM and RAM Data or changing them to certain data (writing) can be done as follows.
- This operation can be used to change the EEPROM's own data, and so on.

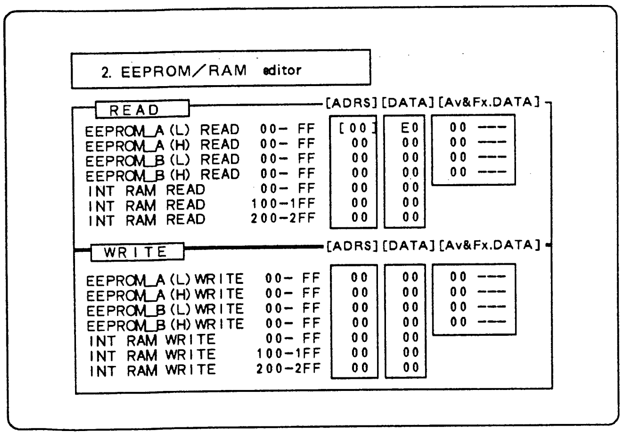
STEP 1



```
Menu : | MAIN | CAMERA          MODEL : AG-DP800

                 MAIN  MENU

 1. How to Operate "PC_EVR".
 2. EEPROM/RAM Editor.
 3. EEPROM Data Check.
 4. Camera Control.
 5. Camera Adjustment.
 6. Send "Commuication program" to I/F.
```

1. Open the Main Menu.
2. Select the "2. EEPROM/RAM Editor". (Move the "_" mark to the "2." position and press the Enter key.)

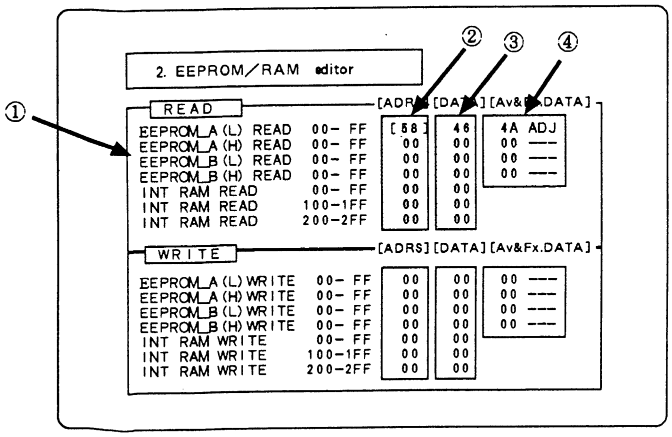
STEP 2



```
 2. EEPROM/RAM  editor

 READ                               [ADRS] [DATA] [Av&Fx.DATA]
EEPROM_A (L) READ   00- FF           [00]    E0    00 ---
EEPROM_A (H) READ   00- FF            00     00    00 ---
EEPROM_B (L) READ   00- FF            00     00    00 ---
EEPROM_B (H) READ   00- FF            00     00    00 ---
 INT RAM READ       00- FF            00     00
 INT RAM READ      100-1FF            00     00
 INT RAM READ      200-2FF            00     00
 WRITE                              [ADRS] [DATA] [Av&Fx.DATA]
EEPROM_A (L) WRITE  00- FF            00     00    00 ---
EEPROM_A (H) WRITE  00- FF            00     00    00 ---
EEPROM_B (L) WRITE  00- FF            00     00    00 ---
EEPROM_B (H) WRITE  00- FF            00     00    00 ---
 INT RAM WRITE      00- FF            00     00
 INT RAM WRITE     100-1FF            00     00
 INT RAM WRITE     200-2FF            00     00
```

1. The display of "2. EEPROM/RAM Editor" appears.

STEP 3

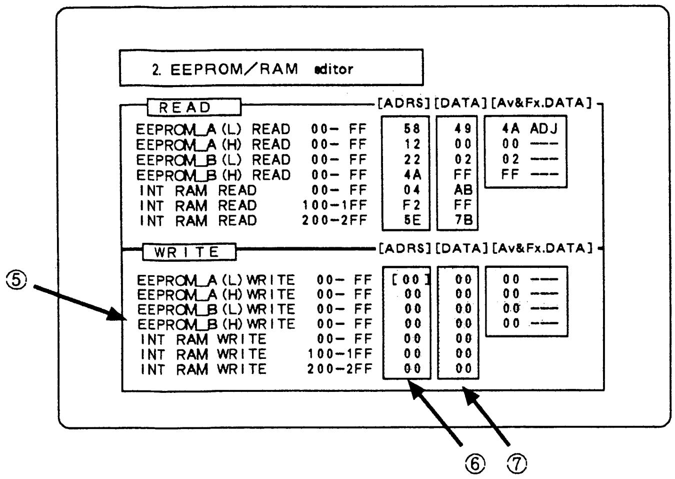


```
 2. EEPROM/RAM  editor

 READ                               [ADR   [DA  ] [Av&  .DATA]
EEPROM_A (L) READ   00- FF           [58]    46    4A ADJ
EEPROM_A (H) READ   00- FF            00     00    00 ---
EEPROM_B (L) READ   00- FF            00     00    00 ---
EEPROM_B (H) READ   00- FF            00     00    00 ---
 INT RAM READ       00- FF            00     00
 INT RAM READ      100-1FF            00     00
 INT RAM READ      200-2FF            00     00
 WRITE                              [ADRS] [DATA] [Av&Fx.DATA]
EEPROM_A (L) WRITE  00- FF            00     00    00 ---
EEPROM_A (H) WRITE  00- FF            00     00    00 ---
EEPROM_B (L) WRITE  00- FF            00     00    00 ---
EEPROM_B (H) WRITE  00- FF            00     00    00 ---
 INT RAM WRITE      00- FF            00     00
 INT RAM WRITE     100-1FF            00     00
 INT RAM WRITE     200-2FF            00     00
```

- Reading of EEPROM/RAM Data

1. Move the cursor on the ADRS part (shown by ②) by 「↑」 and 「↓」 keys, and select the desired EEPROM or RAM. (Refer to the display shown by ①.)
2. Input the address of EEPROM or RAM in hexadecimal number by the key board.
3. The data of the selected address appears on the DATA part (shown by ③).
4. The initial value appears on the part shown by ④.

STEP 4 Writing of EEROM/RAM Data



```
2. EEPROM/RAM editor

READ                              [ADRS] [DATA] [Av&Fx.DATA]
EEPROM_A (L) READ    00- FF         58     49     4A ADJ
EEPROM_A (H) READ    00- FF         12     00     00 ---
EEPROM_B (L) READ    00- FF         22     02     02 ---
EEPROM_B (H) READ    00- FF         4A     FF     FF ---
INT RAM READ         00- FF         04     AB
INT RAM READ        100-1FF         F2     FF
INT RAM READ        200-2FF         5E     7B

WRITE                             [ADRS] [DATA] [Av&Fx.DATA]
EEPROM_A (L) WRITE   00- FF        [00]    00     00 ---
EEPROM_A (H) WRITE   00- FF         00     00     00 ---
EEPROM_B (L) WRITE   00- FF         00     00     00 ---
EEPROM_B (H) WRITE   00- FF         00     00     00 ---
INT RAM WRITE        00- FF         00     00
INT RAM WRITE       100-1FF         00     00
INT RAM WRITE       200-2FF         00     00
```

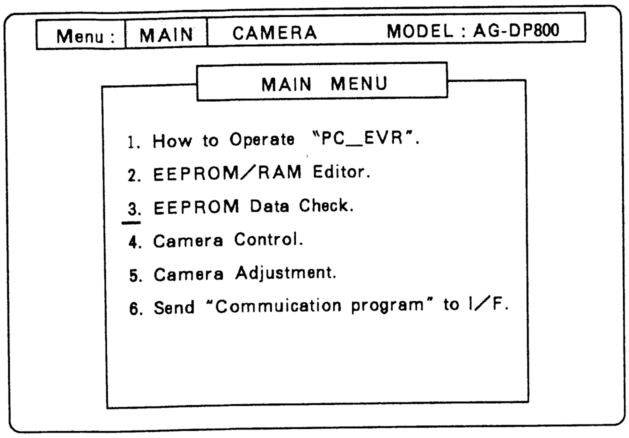
- Writing of EEPROM/RAM Data

1. Move the cursor on the ADRS part (shown by ⑥) by 「↑」 and 「↓」 keys, and select the desired EEPROM or RAM. (Refer to the display shown by ⑤.)
2. Input the address of EEPROM or RAM in hexadecimal number by the key board.
3. Move the cursor to the DATA part (shown by ⑦) by the 「→」 key.
4. Input the data in hexadecimal number.

3-1. How to store the data of EEPROM in the floppy disk

- Store the data of EEPROM in the floppy disk before adjustments.
- If adjustments have been failed, write the data stored in the floppy disk to the EEPROM. (Refer to the section 3-2. "How to write the data of floppy disk to the EEPROM.)

STEP 1



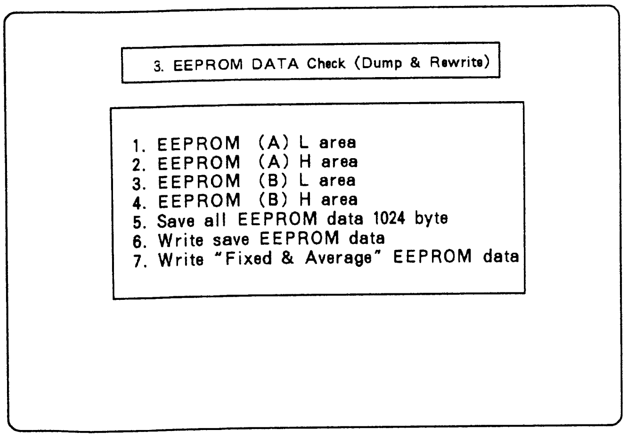
Menu : MAIN CAMERA MODEL : AG-DP800

MAIN MENU

1. How to Operate "PC_EVR".
2. EEPROM/RAM Editor.
3. EEPROM Data Check.
4. Camera Control.
5. Camera Adjustment.
6. Send "Commuication program" to I/F.

1. Open the Main Menu.
2. Select the "3. EEPROM Data Check". (Move the "_" mark to the "3." position and press the Enter key.)

STEP 2

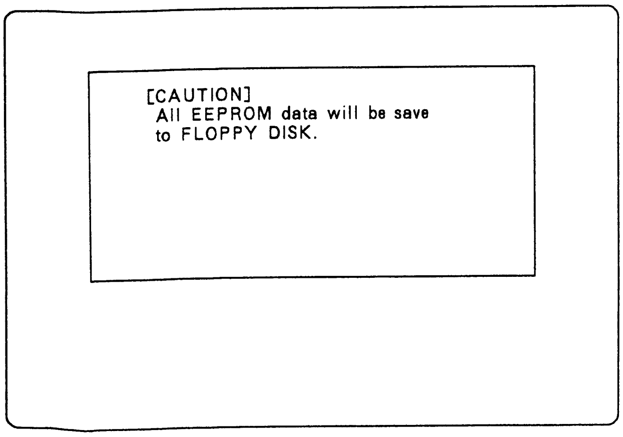


3. EEPROM DATA Check (Dump & Rewrite)

1. EEPROM (A) L area
2. EEPROM (A) H area
3. EEPROM (B) L area
4. EEPROM (B) H area
5. Save all EEPROM data 1024 byte
6. Write save EEPROM data
7. Write "Fixed & Average" EEPROM data

1. The display "3. EEPROM Data Check" appears.
2. Select "5. Save all EEPROM data 1024 byte".

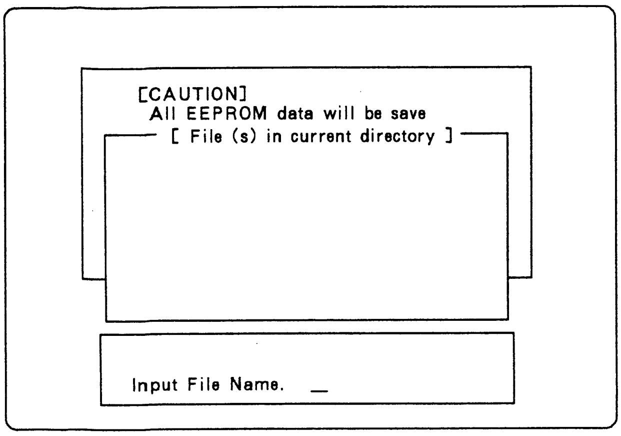
STEP 3



[CAUTION]
All EEPROM data will be save to FLOPPY DISK.

1. The display shown in the left figure appears.
2. Press the Enter key.

STEP 4

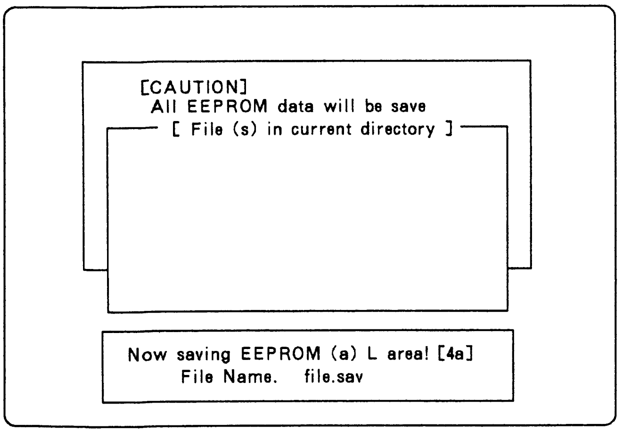


[CAUTION]
All EEPROM data will be save
[File (s) in current directory]

Input File Name. _

1. The display "Input File Name. _ " appears.
2. Input the file name of EEPROM data to be stored by the key board, and press the Enter key.
(8 letters of any alphabet can be used to the maximum as the file name.)

STEP 5

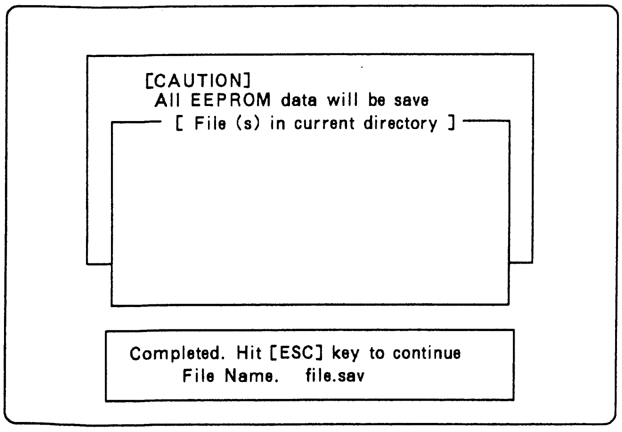


[CAUTION]
All EEPROM data will be save
[File (s) in current directory]

Now saving EEPROM (a) L area! [4a]
File Name. file.sav

1. The data of EEPROM are recorded in the floppy disk automatically according to the following sequence.
(It takes 2 or 3 minutes to record.)
「EEPROM (a) L area」 → 「EEPROM (a) H area」
→ 「EEPROM (b) L area」 → 「EEPROM (b) H area」

STEP 6



[CAUTION]
All EEPROM data will be save
[File (s) in current directory]

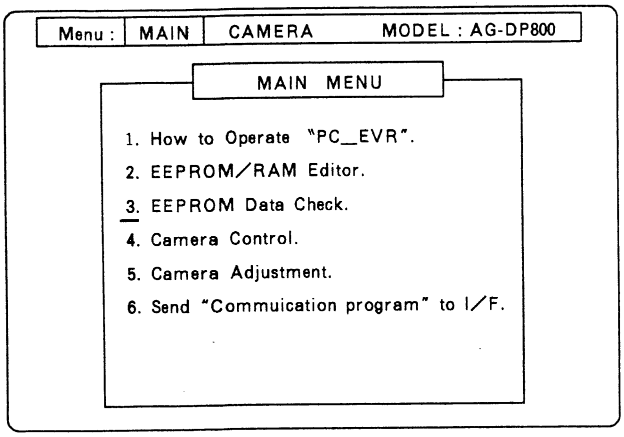
Completed. Hit [ESC] key to continue
File Name. file.sav

1. If the character "Completed." appears on the screen, recording has been completed.
2. Press the ESC key twice, then the displaty returns to the MAIN MENU.

3-2. How to write the data of floppy disk to the EEPROM

- Write the data stored in the floppy disk to the EEPROM.
- If adjustments have been failed, write the data of floppy disk to the EEPROM.
  (Refer to the section 3-1. "How to store the data of EEPROM in the floppy disk.)

STEP 1



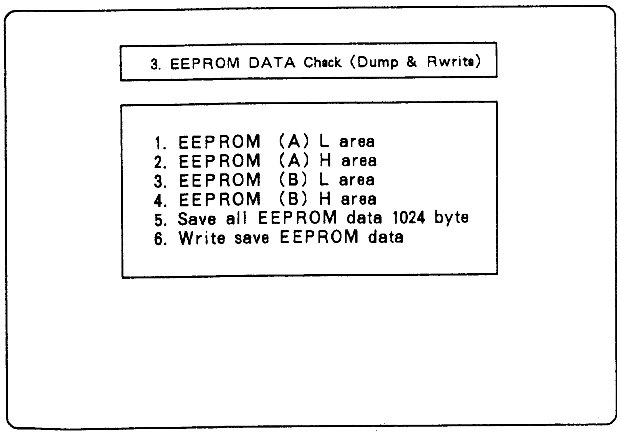
Menu : MAIN | CAMERA | MODEL : AG-DP800

MAIN MENU

1. How to Operate "PC__EVR".
2. EEPROM/RAM Editor.
3. EEPROM Data Check.
4. Camera Control.
5. Camera Adjustment.
6. Send "Commuication program" to I/F.

1. Open the Main Menu.
2. Select the "3. EEPROM Data Check". (Move the "_" mark to the "3." position and press the Enter key.)

STEP 2

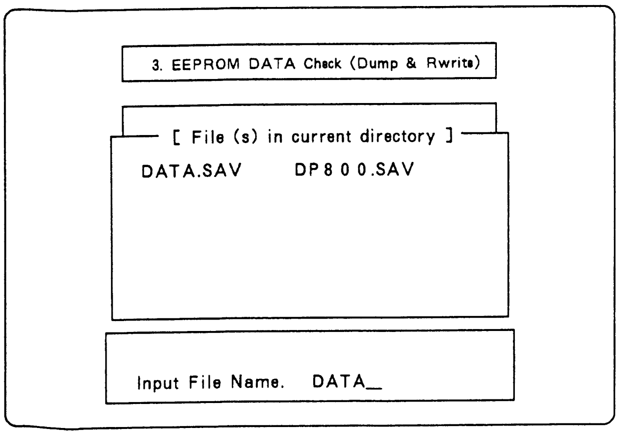


3. EEPROM DATA Check (Dump & Rwrite)

1. EEPROM (A) L area
2. EEPROM (A) H area
3. EEPROM (B) L area
4. EEPROM (B) H area
5. Save all EEPROM data 1024 byte
6. Write save EEPROM data

1. The disply "3. EEPROM Data Check" appears.
2. Select "6. Write save EEPROM data".

STEP 3 Selection of file



3. EEPROM DATA Check (Dump & Rwrite)

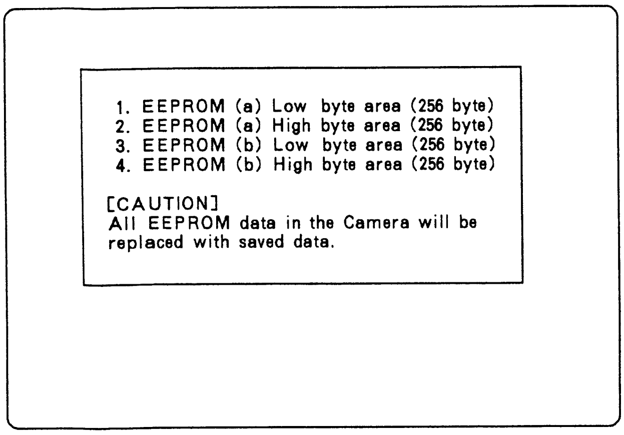
[File (s) in current directory]

DATA.SAV DP800.SAV

Input File Name. DATA_

1. The displaty "Input File Name. _ " appears.
2. Input the file name of EEPROM data stored in the floppy disk by the key board, and press the Enter key.
   In this example, the file "DATA. SAV" and the file "DP800. SAV" are stored in the floppy disk and the file "DATA" is selected.
   (The files stored in the same directory with the software program are the only ones that can be selected.)

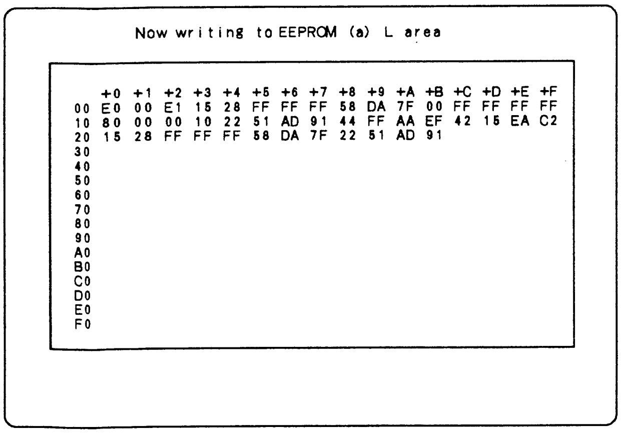
STEP 4 Write the data to the EEPROM



```
1. EEPROM (a) Low  byte area (256 byte)
2. EEPROM (a) High byte area (256 byte)
3. EEPROM (b) Low  byte area (256 byte)
4. EEPROM (b) High byte area (256 byte)

[CAUTION]
All EEPROM data in the Camera will be
replaced with saved data.
```

1. Select "1. EEPROM (a) Low byte area".
2. Press the Enter key.

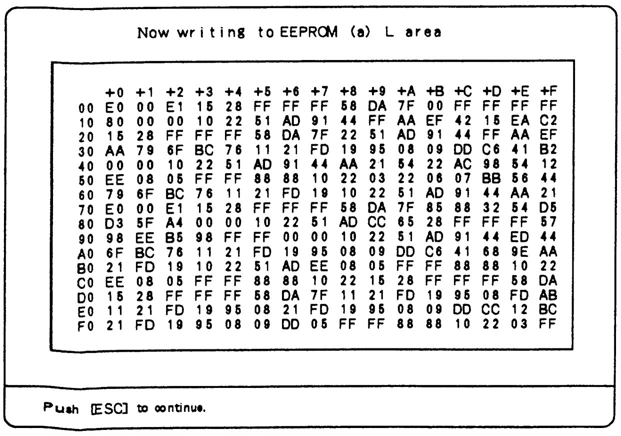
STEP 5 Write the data to the EEPROM



```
Now writing to EEPROM (a) L area

   +0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +A +B +C +D +E +F
00 E0 00 E1 15 28 FF FF FF 58 DA 7F 00 FF FF FF FF
10 80 00 00 10 22 51 AD 91 44 FF AA EF 42 15 EA C2
20 15 28 FF FF FF 58 DA 7F 22 51 AD 91
30
40
50
60
70
80
90
A0
B0
C0
D0
E0
F0
```

1. The data recorded in the floppy disk are saved in the EEPROM automatically.
   (It takes about one minute to save.)
   In this example, the data of "EEPROM (a) Low byte area" are saved.

STEP 6



```
Now writing to EEPROM (a) L area

   +0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +A +B +C +D +E +F
00 E0 00 E1 15 28 FF FF FF 58 DA 7F 00 FF FF FF FF
10 80 00 00 10 22 51 AD 91 44 FF AA EF 42 15 EA C2
20 15 28 FF FF FF 58 DA 7F 22 51 AD 91 44 FF AA EF
30 AA 79 6F BC 76 11 21 FD 19 95 08 09 DD C6 41 B2
40 00 00 10 22 51 AD 91 44 AA 21 54 22 AC 98 54 12
50 EE 08 05 FF FF 88 88 10 22 03 22 06 07 BB 56 44
60 79 6F BC 76 11 21 FD 19 10 22 51 AD 91 44 AA 21
70 E0 00 E1 15 28 FF FF FF 58 DA 7F 85 88 32 54 D5
80 D3 5F A4 00 00 10 22 51 AD CC 65 28 FF FF FF 57
90 98 EE B5 98 FF FF 00 00 10 22 51 AD 91 44 ED 44
A0 6F BC 76 11 21 FD 19 95 08 09 DD C6 41 68 9E AA
B0 21 FD 19 10 22 51 AD EE 08 05 FF FF 88 88 10 22
C0 EE 08 05 FF FF 88 88 10 22 15 28 FF FF FF 58 DA
D0 15 28 FF FF FF 58 DA 7F 11 21 FD 19 95 08 FD AB
E0 11 21 FD 19 95 08 21 FD 19 95 08 09 DD CC 12 BC
F0 21 FD 19 95 08 09 DD 05 FF FF 88 88 10 22 03 FF

Push [ESC] to continue.
```

1. If the display becomes as shown in the left figure, writing has been completed.
2. Write the data of "2. EEPROM (a) High byte area", "3. EEPROM (b) Low byte area" and "4. EEPROM (b) High byte area" according to the steps 4 and 5 as well as "1. EEPROM (a) Low byte area".

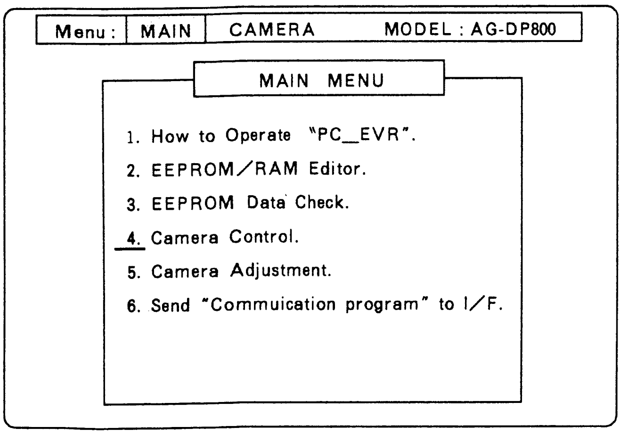
4. How to control the camera

- Control of camera can be operated by the personal computer.
- When adjusting, control of camera can be operated in the condition that the right panel is removed.

※ The following items can be operated.

1. ABB Set.	Execution of ABB
2. AWB Set Ach.	Execution of AWB (Ach)
3. AWB Set Bch.	Execution of AWB (Bch)
4. AWB ch Select	Selection of AWB channel
5. Gain Select	Selection of Gain (0dB→ 9dB→18dB→24dB→Super)
6. AGC ON/ OFF	ON/ OFF of AGC
7. Output Select	Selection of VIDEO Output (Camera／Color Bar)

STEP 1



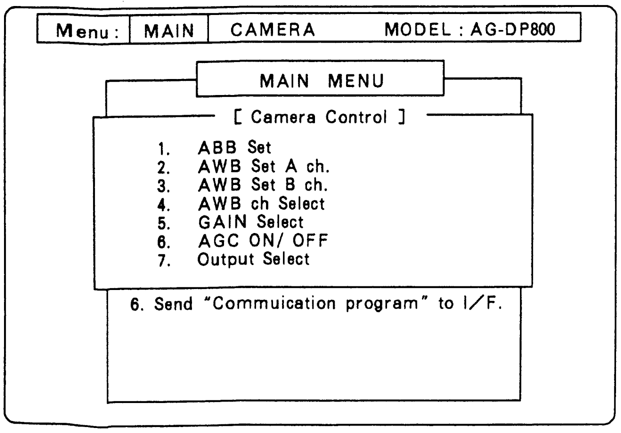
Menu : MAIN | CAMERA MODEL : AG-DP800

MAIN MENU

1. How to Operate "PC_EVR".
2. EEPROM／RAM Editor.
3. EEPROM Data Check.
4. Camera Control.
5. Camera Adjustment.
6. Send "Commuication program" to I／F.

1. Open the Main Menu.
2. Select "4. Camera Control". (Move the "_" mark to the "4." position and press the Enter key.)

STEP 2



Menu : MAIN | CAMERA MODEL : AG-DP800

MAIN MENU

[Camera Control]

1. ABB Set
2. AWB Set A ch.
3. AWB Set B ch.
4. AWB ch Select
5. GAIN Select
6. AGC ON/ OFF
7. Output Select

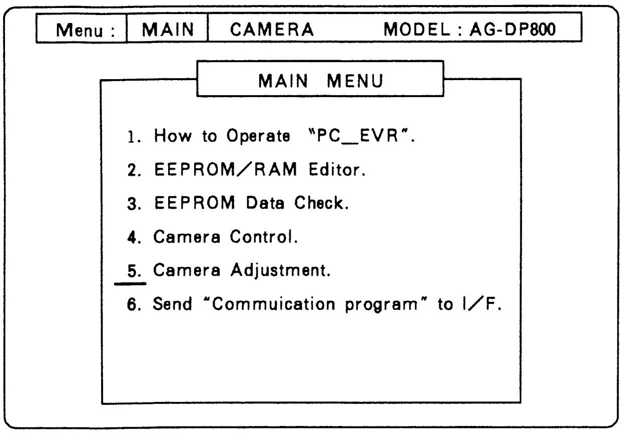
6. Send "Commuication program" to I／F.

1. The display "4. Camera Control" appears.
2. Select the item to be operated and press the Enter key, then the selected item is executed.

5. Electrical Adjustment of the Camera Part (Digital Part)

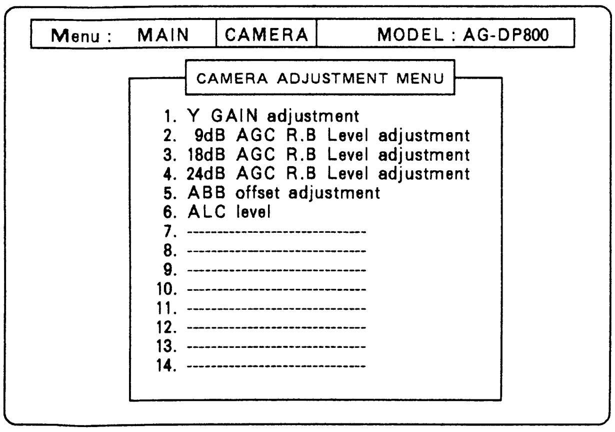
- Electrical Adjustment Procedures of the Camera Part (Digital Part)

STEP 1


Menu : | MAIN | CAMERA MODEL : AG-DP800
MAIN MENU
1. How to Operate "PC__EVR".
2. EEPROM/RAM Editor.
3. EEPROM Data Check.
4. Camera Control.
5. Camera Adjustment.
6. Send "Commuication program" to I/F.

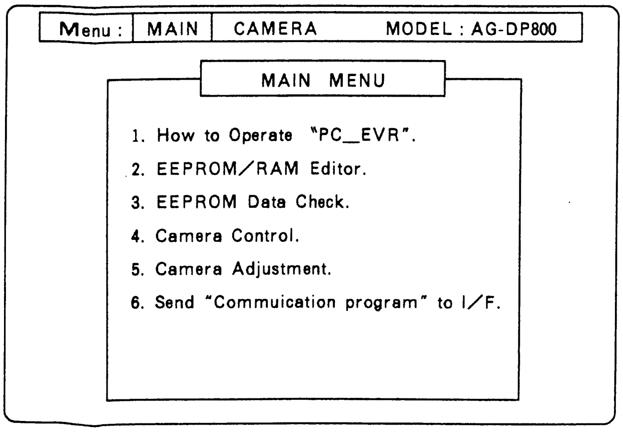
1. Open the Main Menu.
2. Select "5. Camera Adjustment". (Move the "_" mark to the "5." position and press the Enter key.)

STEP 2


Menu : MAIN | CAMERA | MODEL : AG-DP800
CAMERA ADJUSTMENT MENU
1. Y GAIN adjustment
2. 9dB AGC R.B Level adjustment
3. 18dB AGC R.B Level adjustment
4. 24dB AGC R.B Level adjustment
5. ABB offset adjustment
6. ALC level
7. ----------------------------
8. ----------------------------
9. ----------------------------
10. ----------------------------
11. ----------------------------
12. ----------------------------
13. ----------------------------
14. ----------------------------

1. The display "CAMERA ADJUSTMENT MENU" appears.
2. Select the item to be adjusted and press the Enter key.
3. Concerning each adjustment, refer to its explanation.

STEP 3

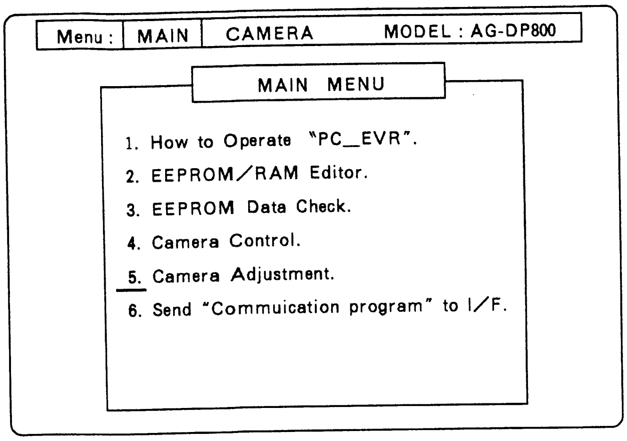

Menu : | MAIN | CAMERA MODEL : AG-DP800
MAIN MENU
1. How to Operate "PC__EVR".
2. EEPROM/RAM Editor.
3. EEPROM Data Check.
4. Camera Control.
5. Camera Adjustment.
6. Send "Commuication program" to I/F.

1. When returning to the Main Menu, press the [←] key at the scene of STEP 2.

5-1. Y Gain Adjustment

- Y Gain Adjustment of the Camera Section
  Connect the oscilloscope to TP3711.

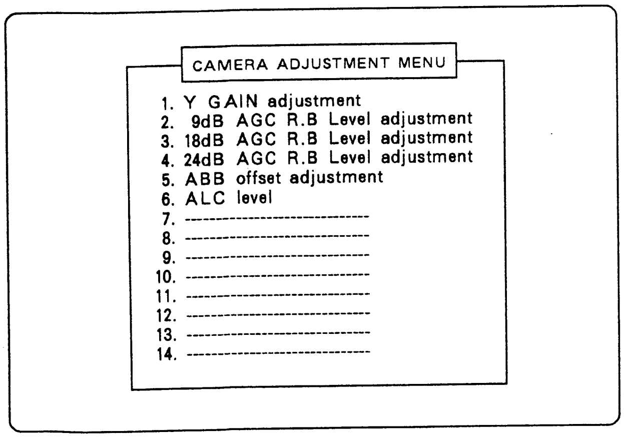
STEP 1



```
Menu : | MAIN | CAMERA          MODEL : AG-DP800

                 MAIN  MENU

  1. How to Operate "PC_EVR".
  2. EEPROM/RAM Editor.
  3. EEPROM Data Check.
  4. Camera Control.
  5. Camera Adjustment.
  6. Send "Commuication program" to I/F.
```

1. Open the Main Menu.
2. Select "5. Camera Adjustment". (Move the "_" mark to the "5." position and press the Enter key.)

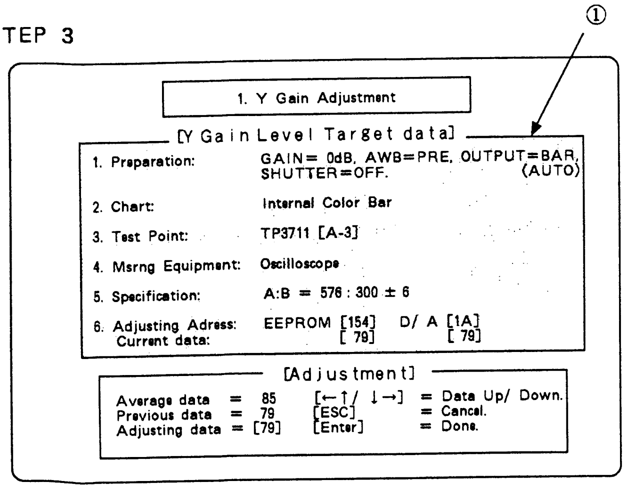
STEP 2



```
           CAMERA ADJUSTMENT MENU

  1. Y GAIN adjustment
  2.  9dB AGC R.B Level adjustment
  3. 18dB AGC R.B Level adjustment
  4. 24dB AGC R.B Level adjustment
  5. ABB offset adjustment
  6. ALC level
  7. ----------------------------
  8. ----------------------------
  9. ----------------------------
 10. ----------------------------
 11. ----------------------------
 12. ----------------------------
 13. ----------------------------
 14. ----------------------------
```

1. The display "CAMERA ADJUSTMENT MENU" appears.
2. Select "1. Y GAIN adjustment".

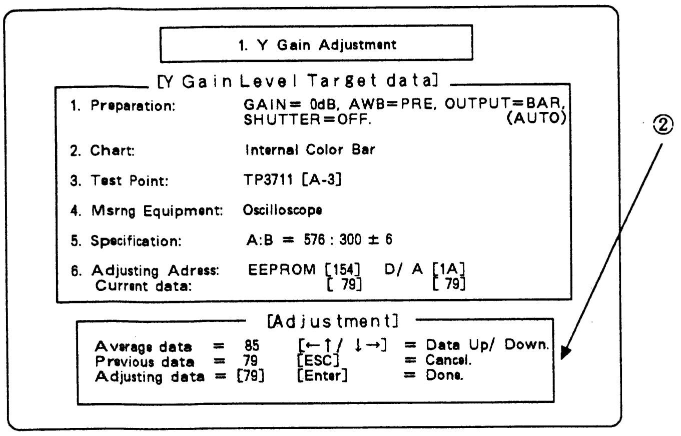
STEP 3



```
                 1. Y Gain Adjustment

          [Y Gain Level Target data]
 1. Preparation:        GAIN= 0dB, AWB=PRE, OUTPUT=BAR,
                        SHUTTER=OFF.                (AUTO)
 2. Chart:              Internal Color Bar
 3. Test Point:         TP3711 [A-3]
 4. Msrng Equipment:    Oscilloscope
 5. Specification:      A:B = 576 : 300 ± 6
 6. Adjusting Adress:   EEPROM [154]    D/ A [1A]
    Current data:              [ 79]         [ 79]

                  [Adjustment]
 Average data   =  85    [←↑/ ↓→]  = Data Up/ Down.
 Previous data  =  79    [ESC]     = Cancel.
 Adjusting data = [79]   [Enter]   = Done.
```

1. The scene shown in the left figure appears.
2. The shaded portion (shown by ①) shows the following items.
   1. Preparation ···· Each item is set up automatically as shown below.
      GAIN=0dB, AWB=PRE,
      OUTPUT=BAR (Color Bar), SHUTTER=OFF
   2. Chart ···· the chart to be used
      Internal Color Bar (It is set up automatically at "1. Preparation".)
   3. Test Point ···· TP3711
   4. Measuring Equipment ···· Oscilloscope
   5. Specification ···· A : B = 576 : 300 ± 6 (NTSC)
      A : B = 700 : 300 ± 6 (PAL)
   6. Adjustment Address and Current data ···· Address and Current data of EEPROM and D/A converter to be adjusted

STEP 4

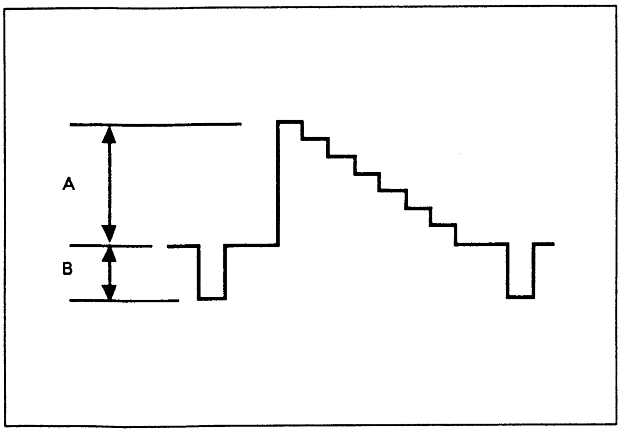


```
                    1. Y Gain Adjustment

 [Y Gain Level Target data]
 1. Preparation:          GAIN= 0dB, AWB=PRE, OUTPUT=BAR,
                          SHUTTER=OFF.                (AUTO)
 2. Chart:                Internal Color Bar
 3. Test Point:           TP3711 [A-3]
 4. Msrng Equipment:      Oscilloscope
 5. Specification:        A:B = 576 : 300 ± 6
 6. Adjusting Adress:     EEPROM [154]   D/ A [1A]
    Current data:                [ 79]        [ 79]

                      [Adjustment]
   Average data   =  85     [←↑/ ↓→]   = Data Up/ Down.
   Previous data  =  79     [ESC]      = Cancel.
   Adjusting data = [79]    [Enter]    = Done.
```

1. Perform adjustments at the shaded portion (shown by ②).
   1. Average data ···· It shows the average data of adjusting value.
   2. Previous data ···· It shows the value before adjustment.
   3. Adjusting data ···· It shows the current adjusting value.

   ※ All value are shown in hexadecimal number and from "00" to "FF".

STEP 5 (Waveform)



1. Adjust "Y GAIN" by the [←] , [↑] , [↓] and [→] keys so that A : B = 576 : 300±6 (NTSC) or A : B = 700 : 300±6 (PAL). (Refer to the left figure.)

   Each key operates as shown below.

   [↑] ···· adjusting value increases by "1"
   [↓] ···· adjusting value decreases by "1"
   [→] ···· adjusting value increases by "16"
   [←] ···· adjusting value decreases by "16"
2. After adjustment, press the Enter key.

   By performing this operation, adjusting value is written in the Adjustment Address of EEPROM and adjustment has been ended.

   [Enter] ···· writing adjusting value and ending adjustment
3. When quitting adjustment, press the ESC key.

   By performing this operation, adjusting value isn't written in the Adjustment Address of EEPROM and adjusting value returns to the value before adjustment.

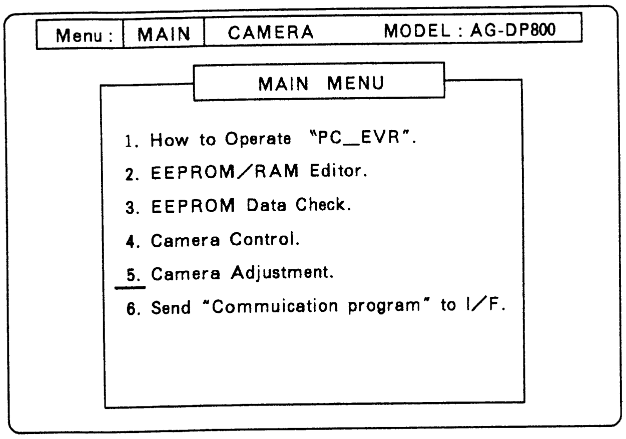
   [ESC] ···· ending adjustment without writing adjusting value

5-2. 9dB AGC R.B Level Adjustment

- 9dB AGC R.B Level Adjustment of the Camera Section

Connect the vectorscope to the CAMERA OUT terminal of AG-DP800.

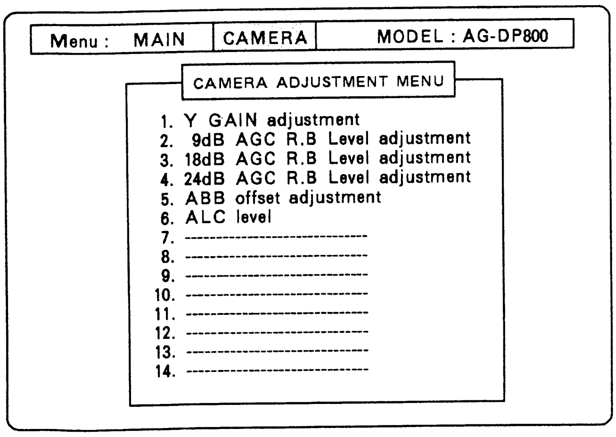
STEP 1



```
Menu : | MAIN | CAMERA        MODEL : AG-DP800

              MAIN MENU

 1. How to Operate "PC_EVR".
 2. EEPROM/RAM Editor.
 3. EEPROM Data Check.
 4. Camera Control.
 5. Camera Adjustment.
 6. Send "Commuication program" to I/F.
```

1. Open the Main Menu.
2. Select "5. Camera Adjustment". (Move the "_" mark to the "5." position and press the Enter key.)

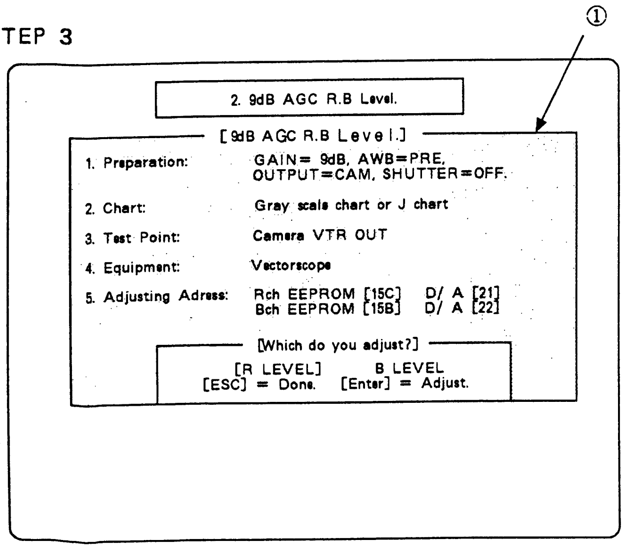
STEP 2



```
Menu :  MAIN | CAMERA |     MODEL : AG-DP800

        CAMERA ADJUSTMENT MENU

 1. Y GAIN adjustment
 2.  9dB AGC R.B Level adjustment
 3. 18dB AGC R.B Level adjustment
 4. 24dB AGC R.B Level adjustment
 5. ABB offset adjustment
 6. ALC level
 7. ---------------------------
 8. ---------------------------
 9. ---------------------------
10. ---------------------------
11. ---------------------------
12. ---------------------------
13. ---------------------------
14. ---------------------------
```

1. The display "CAMERA ADJUSTMENT MENU" appears.
2. Select "2. 9dB AGC R.B Level adjustment".

STEP 3



```
                2. 9dB AGC R.B Level.

            [9dB AGC R.B Level.]
1. Preparation:        GAIN= 9dB, AWB=PRE,
                       OUTPUT=CAM, SHUTTER=OFF.
2. Chart:              Gray scale chart or J chart
3. Test Point:         Camera VTR OUT
4. Equipment:          Vectorscope
5. Adjusting Adress:   Rch EEPROM [15C]   D/ A [21]
                       Bch EEPROM [15B]   D/ A [22]

              [Which do you adjust?]
           [R LEVEL]         B LEVEL
         [ESC] = Done.   [Enter] = Adjust.
```

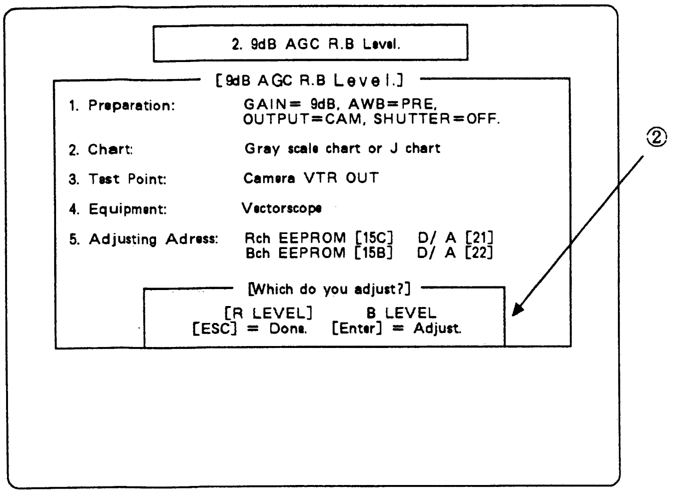
1. The scene shown in the left figure appears.
2. The shaded portion (shown by ①) shows the following items.
   1. Preparation ···· Each item is set up automatically as shown below.

      GAIN=9dB, AWB=PRE,

      OUTPUT=CAM, SHUTTER=OFF
   2. Chart ···· the chart to be used

      Gray scale chart or J chart
   3. Test Point ···· CAMERA OUT
   4. Equipment ···· Vectorscope
   5. Adjustment Address ···· Address of EEPROM and D/A converter to be adjusted

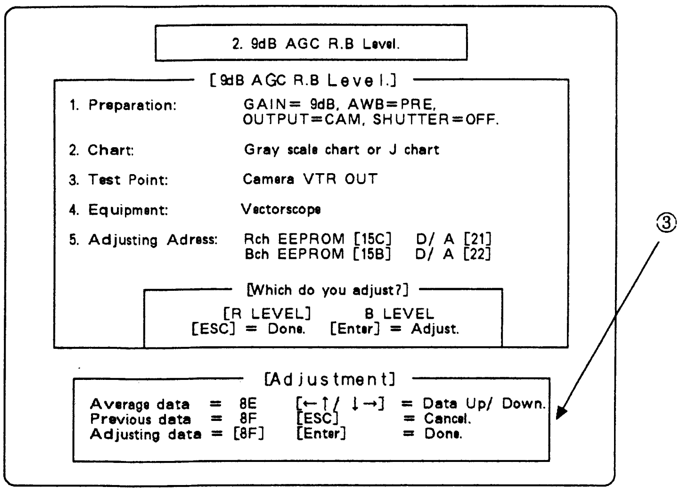
STEP 4



```
2. 9dB AGC R.B Level.

[9dB AGC R.B Level.]
1. Preparation:        GAIN= 9dB, AWB=PRE,
                       OUTPUT=CAM, SHUTTER=OFF.
2. Chart:              Gray scale chart or J chart
3. Test Point:         Camera VTR OUT
4. Equipment:          Vectorscope
5. Adjusting Adress:   Rch EEPROM [15C]   D/ A [21]
                       Bch EEPROM [15B]   D/ A [22]

            [Which do you adjust?]
          [R LEVEL]        B LEVEL
       [ESC] = Done.   [Enter] = Adjust.
```

1. Select the R channel by the [←] and [→] keys at the shaded portion (shown by ②).
2. Press the Enter key.

STEP 5



```
2. 9dB AGC R.B Level.

[9dB AGC R.B Level.]
1. Preparation:        GAIN= 9dB, AWB=PRE,
                       OUTPUT=CAM, SHUTTER=OFF.
2. Chart:              Gray scale chart or J chart
3. Test Point:         Camera VTR OUT
4. Equipment:          Vectorscope
5. Adjusting Adress:   Rch EEPROM [15C]   D/ A [21]
                       Bch EEPROM [15B]   D/ A [22]

            [Which do you adjust?]
          [R LEVEL]        B LEVEL
       [ESC] = Done.   [Enter] = Adjust.

[Adjustment]
Average data   =  8E    [←↑/ ↓→]  = Data Up/ Down.
Previous data  =  8F    [ESC]     = Cancel.
Adjusting data = [8F]   [Enter]   = Done.
```

1. The scene shown in the left figure appears.
2. Perform adjustments at the shaded portion (shown by ③).
    1. Average data ···· It shows the average data of adjusting value.
    2. Previous data ···· It shows the value before adjustment.
    3. Adjusting data ···· It shows the current adjusting value.

    ※ All value are shown in hexadecimal number and from "00" to "FF".

STEP 6

1. Adjust the level of the R channel by the [←] , [↑] , [↓] and [→] keys so that the subcarrier noise is centered on the vectorscope as shown in the figure on the next page.

    Each key operates as shown below.

    [↑] ···· adjusting value increases by "1"
    [↓] ···· adjusting value decreases by "1"
    [→] ···· adjusting value increases by "16"
    [←] ···· adjusting value decreases by "16"

2. After adjustment, press the Enter key.

    By performing this operation, adjusting value is written in the Adjustment Address of EEPROM and the display returns to the scene at STEP 4.

    [Enter] ···· writing adjusting value and the display returns to the scene at STEP 4.

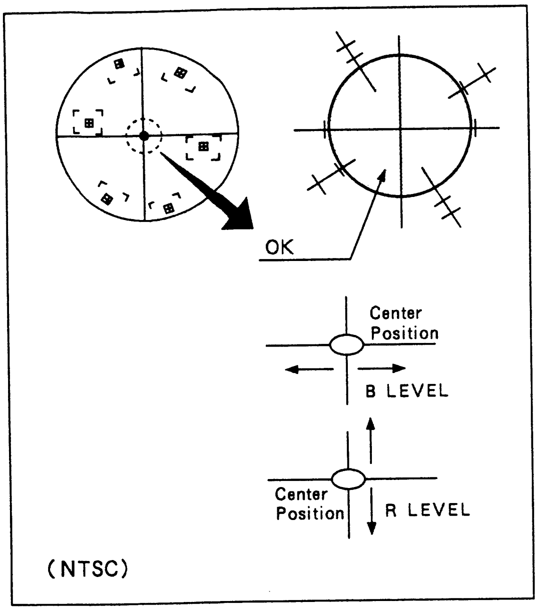
3. When quitting adjustment, press the ESC key.

    By performing this operation, adjusting value isn't written in the Adjustment Address of EEPROM and adjusting value returns to the value before adjustment.

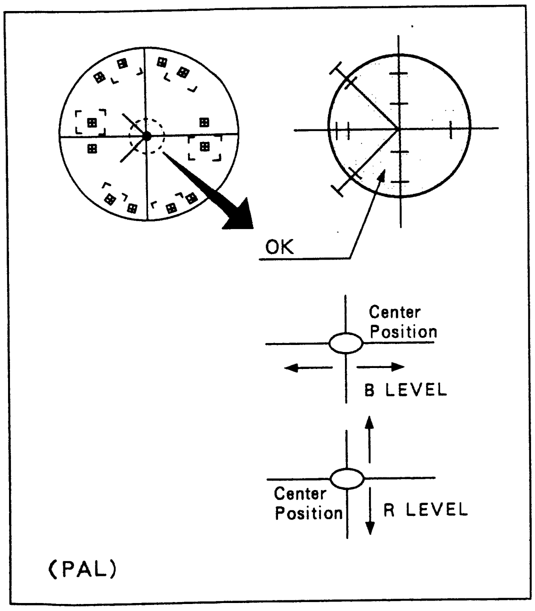
    And the display returns to the scene at STEP 4.

    [ESC] ···· quitting adjustment without writing adjusting value

STEP 7


OK
Center Position
B LEVEL
Center Position
R LEVEL

(NTSC)


OK
Center Position
B LEVEL
Center Position
R LEVEL

(PAL)

1. Select the B channel by the [←] and [→] keys at the scene of STEP 4.
2. Press the Enter key.
3. Adjust the level of the B channel by the [←] , [↑] , [↓] and [→] keys so that the subcarrier noise is centered on the vectorscope in the same way as the the R channel.

Confirm that the subcarrier noise is centered on the vectorscope as shown in the left figure.
If not, repeat the steps from 4 to 7.

STEP 8

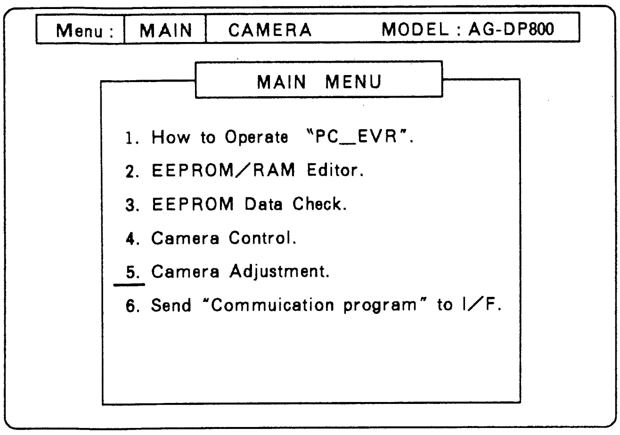
1. After performing adjustments at the scene of STEP 5, press the Enter key. Then the display returns to the scene of STEP 4.
2. Press the ESC key at the scene of STEP 4. Then the display returns to "CAMERA ADJUSTMENT MENU" at STEP 2.

5-3. 18dB AGC R.B Level Adjustment

- 18dB AGC R.B Level Adjustment of the Camera Section

Connect the vectorscope to the CAMERA OUT terminal of AG-DP800.

STEP 1



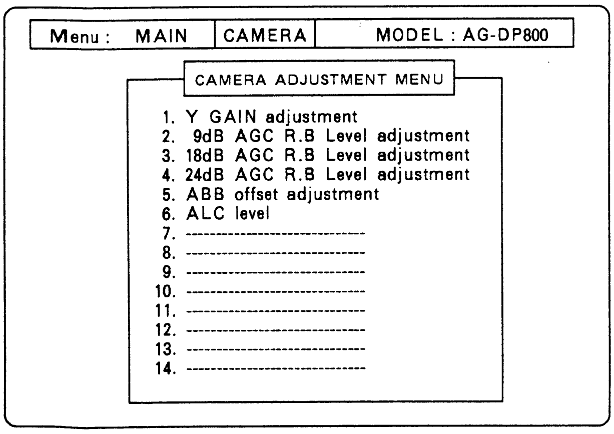
Menu : MAIN CAMERA MODEL : AG-DP800

MAIN MENU

1. How to Operate "PC_EVR".
2. EEPROM/RAM Editor.
3. EEPROM Data Check.
4. Camera Control.
5. Camera Adjustment.
6. Send "Commuication program" to I/F.

1. Open the Main Menu.
2. Select "5. Camera Adjustment". (Move the "_" mark to the "5." position and press the Enter key.)

STEP 2



Menu : MAIN CAMERA MODEL : AG-DP800

CAMERA ADJUSTMENT MENU

1. Y GAIN adjustment
2. 9dB AGC R.B Level adjustment
3. 18dB AGC R.B Level adjustment
4. 24dB AGC R.B Level adjustment
5. ABB offset adjustment
6. ALC level
7. ------------------------------
8. ------------------------------
9. ------------------------------
10. ------------------------------
11. ------------------------------
12. ------------------------------
13. ------------------------------
14. ------------------------------

1. The display "CAMERA ADJUSTMENT MENU" appears.
2. Select "3. 18dB AGC R.B Level adjustment".

STEP 3

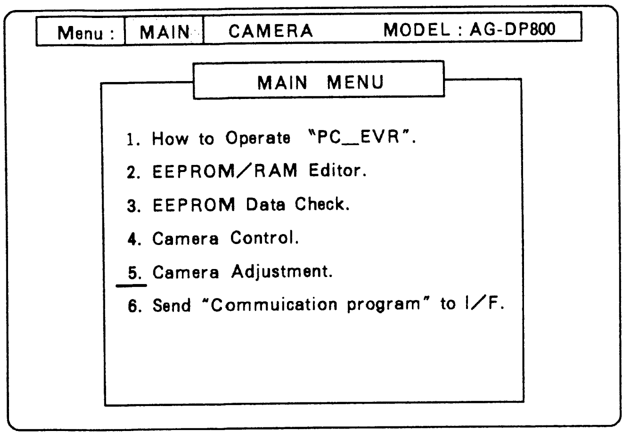
1. Adjust the level of the R channel and the level of the B channel in the same way as "2. 9dB AGC R.B Level adjustment".

5-4. 24dB AGC R.B Level Adjustment

- 24dB AGC R.B Level Adjustment of the Camera Section

Connect the vectorscope to the CAMERA OUT terminal of AG-DP800.

STEP 1



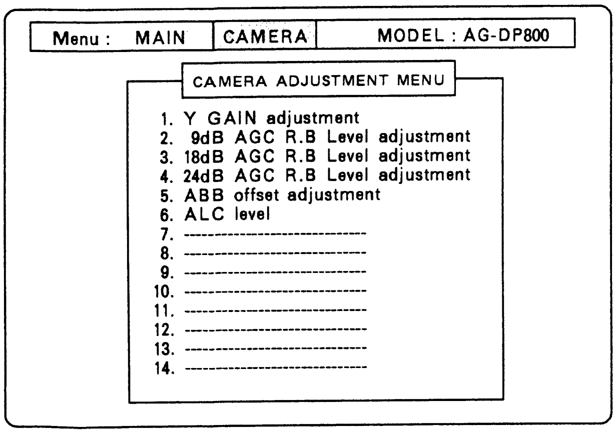
Menu : MAIN CAMERA MODEL : AG-DP800

MAIN MENU

1. How to Operate "PC_EVR".
2. EEPROM/RAM Editor.
3. EEPROM Data Check.
4. Camera Control.
5. Camera Adjustment.
6. Send "Commuication program" to I/F.

1. Open the Main Menu.
2. Select "5. Camera Adjustment". (Move the "_" mark to the "5." position and press the Enter key.)

STEP 2



Menu : MAIN CAMERA MODEL : AG-DP800

CAMERA ADJUSTMENT MENU

1. Y GAIN adjustment
2. 9dB AGC R.B Level adjustment
3. 18dB AGC R.B Level adjustment
4. 24dB AGC R.B Level adjustment
5. ABB offset adjustment
6. ALC level
7. ---------------------------
8. ---------------------------
9. ---------------------------
10. ---------------------------
11. ---------------------------
12. ---------------------------
13. ---------------------------
14. ---------------------------

1. The display "CAMERA ADJUSTMENT MENU" appears.
2. Select "4. 24dB AGC R.B Level adjustment".

STEP 3

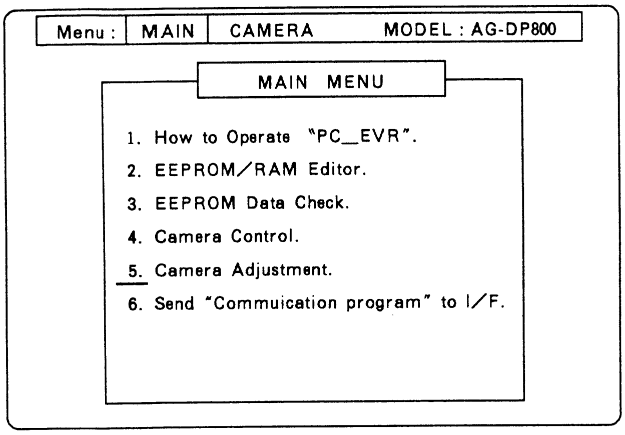
1. Adjust the level of the R channel and the level of the B channel in the same way as "2. 9dB AGC R.B Level adjustment".

5-5. ABB Offset Adjustment

- ABB Offset Adjustment of the Camera Section

Connect the vectorscope to the CAMERA OUT terminal of AG-DP800.

STEP 1



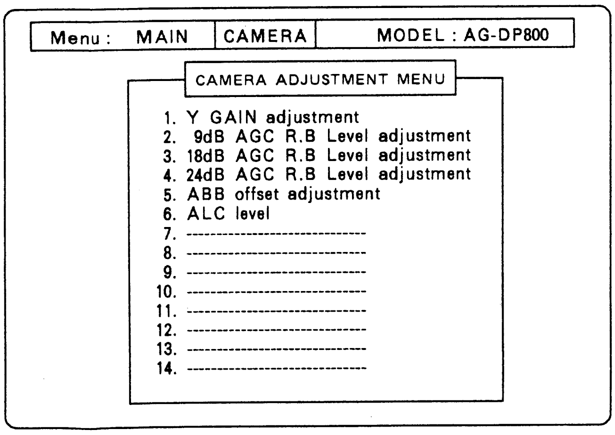
Menu : MAIN CAMERA MODEL : AG-DP800

MAIN MENU

1. How to Operate "PC_EVR".
2. EEPROM/RAM Editor.
3. EEPROM Data Check.
4. Camera Control.
5. Camera Adjustment.
6. Send "Commuication program" to I/F.

1. Open the Main Menu.
2. Select "5. Camera Adjustment". (Move the "_" mark to the "5." position and press the Enter key.)

STEP 2



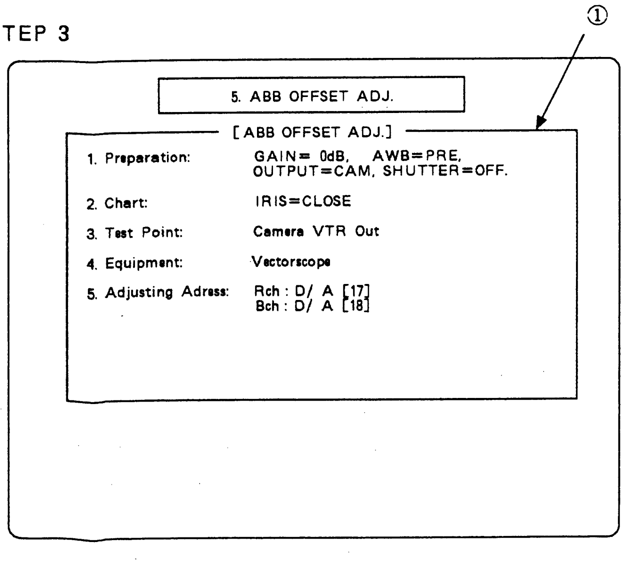
Menu : MAIN CAMERA MODEL : AG-DP800

CAMERA ADJUSTMENT MENU

1. Y GAIN adjustment
2. 9dB AGC R.B Level adjustment
3. 18dB AGC R.B Level adjustment
4. 24dB AGC R.B Level adjustment
5. ABB offset adjustment
6. ALC level
7. ------------------------------
8. ------------------------------
9. ------------------------------
10. ------------------------------
11. ------------------------------
12. ------------------------------
13. ------------------------------
14. ------------------------------

1. The display "CAMERA ADJUSTMENT MENU" appears.
2. Select "5. ABB offset adjustment".

STEP 3



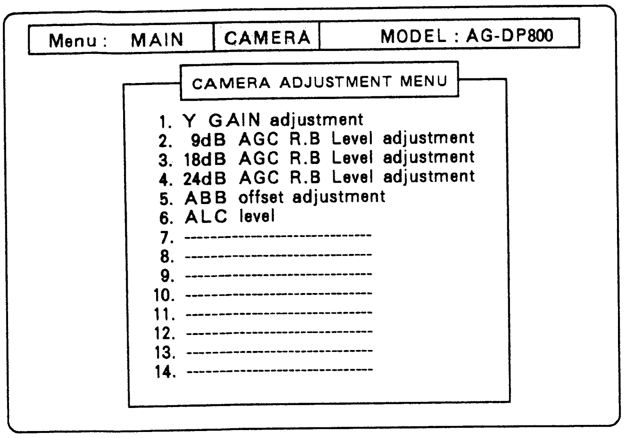
5. ABB OFFSET ADJ.

[ABB OFFSET ADJ.]

1. Preparation: GAIN= 0dB, AWB=PRE, OUTPUT=CAM, SHUTTER=OFF.
2. Chart: IRIS=CLOSE
3. Test Point: Camera VTR Out
4. Equipment: Vectorscope
5. Adjusting Adress: Rch : D/ A [17] Bch : D/ A [18]

1. The scene shown in the left figure appears and the "ABB" is performed.
2. The shaded portion (shown by ①) shows the following items.
   1. Preparation ···· Each item is set up automatically as shown below.
      GAIN=0dB, AWB=PRE,
      OUTPUT=CAM, SHUTTER=OFF
   2. Chart ···· the chart to be used
      IRIS=CLOSE
   3. Test Point ···· CAMERA OUT
   4. Equipment ···· Vectorscope
   5. Adjustment Address ···· Address of D/A converter to be adjusted

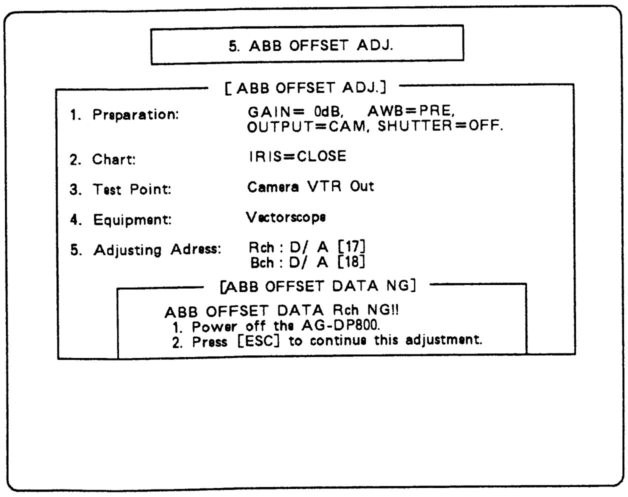
STEP 9



```
Menu :  MAIN  | CAMERA |  MODEL : AG-DP800

          CAMERA ADJUSTMENT MENU

   1. Y GAIN adjustment
   2.  9dB AGC R.B Level adjustment
   3. 18dB AGC R.B Level adjustment
   4. 24dB AGC R.B Level adjustment
   5. ABB offset adjustment
   6. ALC level
   7. ----------------------------
   8. ----------------------------
   9. ----------------------------
  10. ----------------------------
  11. ----------------------------
  12. ----------------------------
  13. ----------------------------
  14. ----------------------------
```

1. The adjusting value is written in the Adjustment Address of EEPROM and the scene returns to "CAMERA ADJUSTMENT MENU". ("ABB Offset Adjustment" has been completed.)

STEP 10



```
            5. ABB OFFSET ADJ.

            [ ABB OFFSET ADJ.]
1. Preparation:         GAIN= 0dB,  AWB=PRE,
                        OUTPUT=CAM, SHUTTER=OFF.
2. Chart:               IRIS=CLOSE
3. Test Point:          Camera VTR Out
4. Equipment:           Vectorscope
5. Adjusting Adress:    Rch : D/ A [17]
                        Bch : D/ A [18]
            [ABB OFFSET DATA NG]
      ABB OFFSET DATA Rch NG!!
       1. Power off the AG-DP800.
       2. Press [ESC] to continue this adjustment.
```

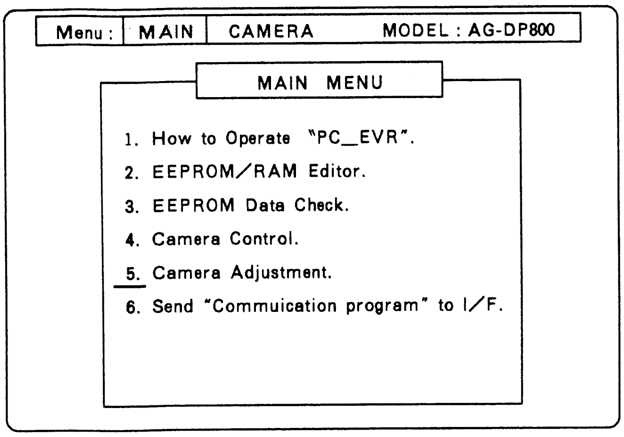
1. "ABB Offset Adjustment" has been failed and the scene shown in the left figure" appears. Perform "ABB Offset Adjustment" again as follows.
   a. Power off the AG-DP800.
   b. Power on the AG-DP800.
   c. Press the ESC key. Then the stage returns to STEP 3.
   d. Repeat the steps from 3 to 8.

Repeat the steps from 3 to 9 (10) until "ABB Offset Adjustment" has been completed."

5-6. ALC Level Adjustment

- ALC (Auto Lens iris Control) Level can be adjusted by PC-EVR.

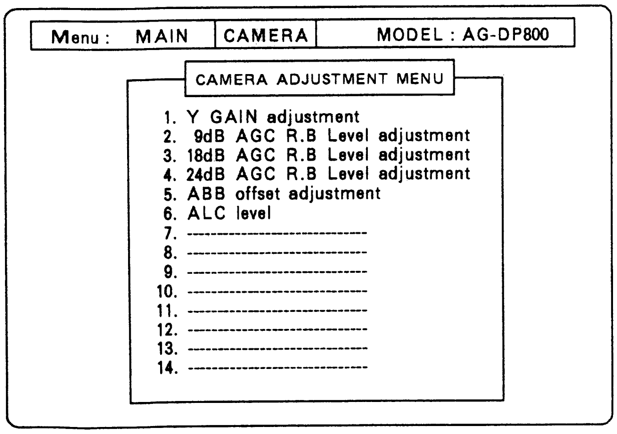
STEP 1



```
Menu : | MAIN | CAMERA        MODEL : AG-DP800

              MAIN MENU

   1. How to Operate "PC_EVR".
   2. EEPROM/RAM Editor.
   3. EEPROM Data Check.
   4. Camera Control.
   5. Camera Adjustment.
   6. Send "Commuication program" to I/F.
```

1. Open the Main Menu.
2. Select "5. Camera Adjustment". (Move the "_" mark to the "5." position and press the Enter key.)

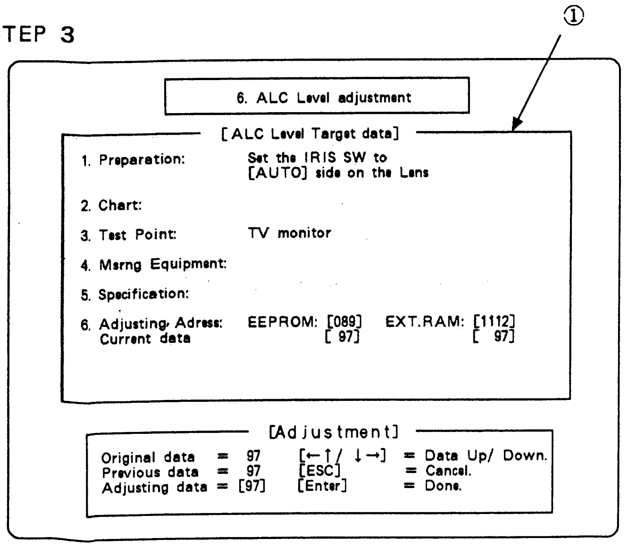
STEP 2



```
Menu :   MAIN | CAMERA |        MODEL : AG-DP800

        CAMERA ADJUSTMENT MENU

   1. Y GAIN adjustment
   2.  9dB AGC R.B Level adjustment
   3. 18dB AGC R.B Level adjustment
   4. 24dB AGC R.B Level adjustment
   5. ABB offset adjustment
   6. ALC level
   7. ----------------------------
   8. ----------------------------
   9. ----------------------------
  10. ----------------------------
  11. ----------------------------
  12. ----------------------------
  13. ----------------------------
  14. ----------------------------
```

1. The display "CAMERA ADJUSTMENT MENU" appears.
2. Select "6. ALC level".

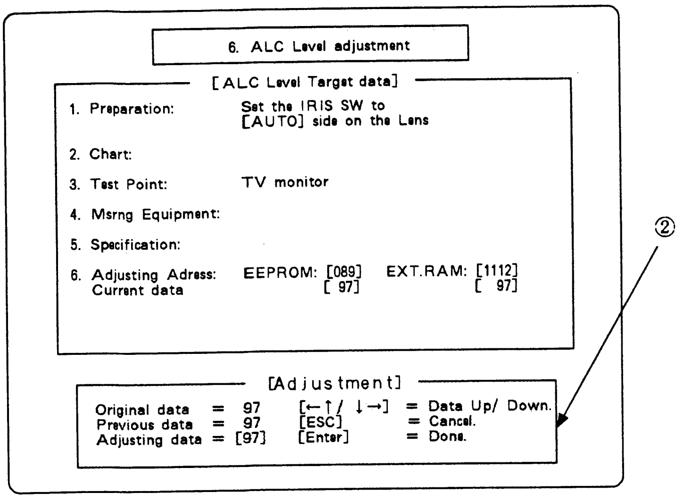
STEP 3



```
                6. ALC Level adjustment

             [ALC Level Target data]
 1. Preparation:          Set the IRIS SW to
                          [AUTO] side on the Lens
 2. Chart:
 3. Test Point:           TV monitor
 4. Msrng Equipment:
 5. Specification:
 6. Adjusting Adress:     EEPROM: [089]   EXT.RAM: [1112]
    Current data                  [ 97]            [  97]

                     [Adjustment]
  Original data   =  97    [←↑/ ↓→]  = Data Up/ Down.
  Previous data   =  97    [ESC]     = Cancel.
  Adjusting data  = [97]   [Enter]   = Done.
```

1. The scene shown in the left figure appears.
2. The shaded portion (shown by ①) shows the following items.
   1. Preparation ···· Set the IRIS SW to [AUTO] side on the Lens.
   3. Test Point ···· TV monitor
   6. Adjusting Address and Current data ···· Address and Current data of EEPROM and EXT.RAM

STEP 4



```
                 6. ALC Level adjustment

  ───────── [ALC Level Target data] ─────────
  1. Preparation:        Set the IRIS SW to
                         [AUTO] side on the Lens

  2. Chart:

  3. Test Point:         TV monitor

  4. Msrng Equipment:

  5. Specification:

  6. Adjusting Adress:   EEPROM: [089]   EXT.RAM: [1112]
     Current data                [ 97]            [  97]

  ───────── [Adjustment] ─────────
  Original data  =  97   [←↑/ ↓→]  = Data Up/ Down.
  Previous data  =  97   [ESC]     = Cancel.
  Adjusting data = [97]  [Enter]   = Done.
```

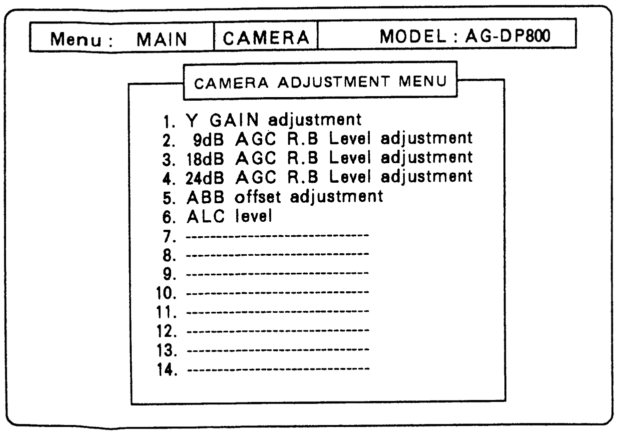
1. Perform adjustments at the shaded portion (shown by ②).
   1. Original data ···· It shows the data set at the factory.
   2. Previous data ···· It shows the value before adjustment.
   3. Adjusting data ···· It shows the current adjusting value.

   ※ All value are shown in hexadecimal number and from "00" to "FF".

STEP 5

1. Adjust the ALC Level by the [←] , [↑] , [↓] and [→] keys.
   Each key operates as shown below.
   [↑] ···· adjusting value increases by "1"
   [↓] ···· adjusting value decreases by "1"
   [→] ···· adjusting value increases by "16"
   [←] ···· adjusting value decreases by "16"
2. After adjustment, press the Enter key.
   By performing this operation, adjusting value is written in the Adjustment Addresses of EEPROM and EXT.RAM, and display returns to the scene at STEP 2.
   [Enter] ···· writing adjusting value and the display returns to "CAMERA ADJUSTMENT MENU".
3. When quitting adjustment, press the ESC key.
   By performing this operation, adjusting value isn't written in the Adjustment Addresses of EEPROM and EXT.RAM and adjusting value returns to the value before adjustment. The display returns to "CAMERA ADJUSTMENT MENU".
   [ESC] ···· quitting adjustment without writing adjusting value

STEP 6



```
 Menu :  MAIN  | CAMERA |      MODEL : AG-DP800

        CAMERA ADJUSTMENT MENU

    1. Y GAIN adjustment
    2.  9dB AGC R.B Level adjustment
    3. 18dB AGC R.B Level adjustment
    4. 24dB AGC R.B Level adjustment
    5. ABB offset adjustment
    6. ALC level
    7. ----------------------------
    8. ----------------------------
    9. ----------------------------
   10. ----------------------------
   11. ----------------------------
   12. ----------------------------
   13. ----------------------------
   14. ----------------------------
```

1. After performing adjustment, press the [←] key. Then the display returns to the "MAIN MENU".

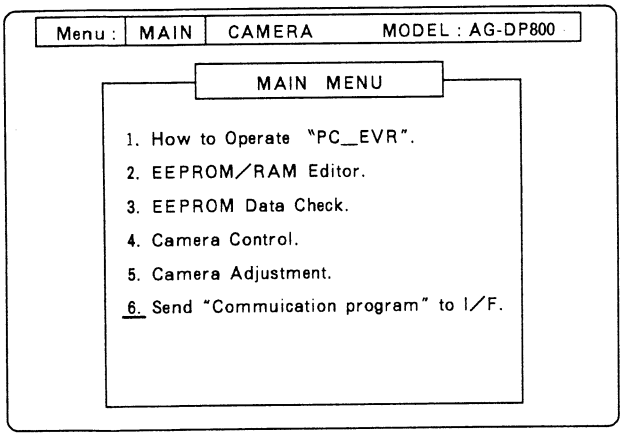
※ When returning the ALC Level to the initial value set at the factort, write the original data "97" at STEP 5.

6. Send "Communication Program" to I/F.

- This menu establishes the communication from the computer to the camera through the I/F Box Unit.
- The "Communication Program" can be downloaded again to the I/F Box Unit without returning to STEP 1 of "1-2. How to start the PC-EVR software" in the following cases.

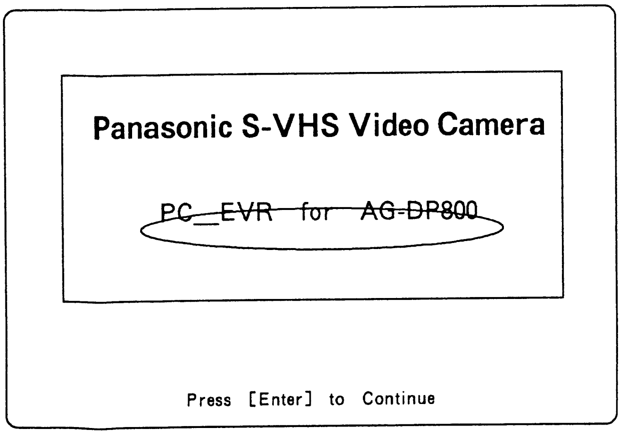
  1. When performing Power on/off sequence in wrong order,
  2. When re-establishing communication to the I/F Box Unit after reboot,

STEP 1


Menu : MAIN CAMERA MODEL : AG-DP800
MAIN MENU
1. How to Operate "PC_EVR".
2. EEPROM/RAM Editor.
3. EEPROM Data Check.
4. Camera Control.
5. Camera Adjustment.
6. Send "Commuication program" to I/F.

1. Open the Main Menu.
2. Select '6. Send "Communication program" to I/F' . (Move the "_" mark to the "6." position and press the Enter key.) .

STEP 2



Panasonic S-VHS Video Camera

~~PC_EVR for AG-DP800~~

Press [Enter] to Continue

1. The display returns to "Starting Display" as shown in the left figure.
2. Follow the steps from 3 to 8 of "1-2. How to start the PC-EVR Software."